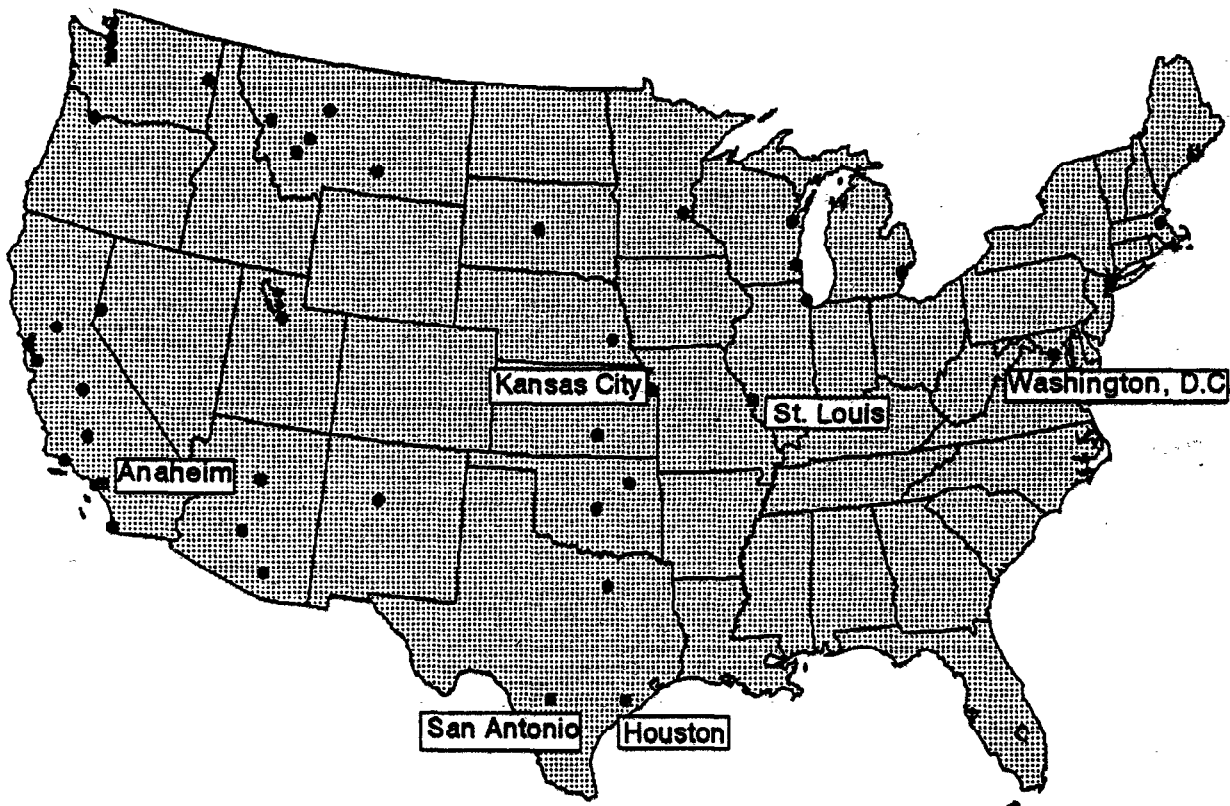


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**ASSESSMENT OF THE HEALTH NEEDS OF AMERICAN INDIANS/ALASKA
NATIVES LIVING IN CITIES NOT SERVED BY AN URBAN INDIAN HEALTH
PROGRAM FUNDED BY INDIAN HEALTH SERVICE**



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September, 1992

**ASSESSMENT OF THE HEALTH NEEDS OF AMERICAN INDIANS/ALASKA
NATIVES LIVING IN CITIES NOT SERVED BY AN URBAN INDIAN
HEALTH PROGRAM FUNDED BY INDIAN HEALTH SERVICE**

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Prepared for:

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September, 1992

ASSESSMENT OF THE HEALTH NEEDS OF AMERICAN INDIANS/ALASKA NATIVES LIVING IN CITIES NOT SERVED BY AN URBAN INDIAN HEALTH PROGRAM FUNDED BY INDIAN HEALTH SERVICE

EXECUTIVE SUMMARY

The purpose of this report is to present findings on the health status and health needs of American Indians/Alaska Natives in six urban areas not currently served by urban Indian health programs funded by the Indian Health Service. In accordance with requirements of Title V, Section 504, of the Indian Health Care Improvement Act, a health needs assessment was conducted in six U.S. cities to determine the health status and health needs of American Indian/Alaska Native residents of these urban areas.

Methodology

Several methods were used to conduct the assessment, including: analysis of 1990 Census population data; analysis of city-specific mortality data; meetings with American Indian/Alaska Native community leaders; meetings with local health officials; and analyses of selected health indicators, Health Risk Appraisals, and Community Health Assessment data. Based on these data sources, this report presents significant findings, conclusions, and recommendations on the health status and health needs of American Indian/Alaska Native residents of the six study cities.

Findings

Health Status

Heart disease is the leading cause of death among urban **American** Indians/Alaska Natives. Certain cardiovascular risk factors, including smoking, obesity, and lack of exercise, are more prevalent among assessment participants than among the U.S. general population.

Accidents are the third leading cause of death among urban American Indians/Alaska Natives. Injury-associated behavioral risk factors that are more prevalent among assessment participants than among the U.S. general population include non-use of seatbelts, drinking and driving, and binge drinking. Lack of **seatbelt** use among participants is two times greater, and drinking and driving is four times greater than in the U.S. population.

Twelve percent of assessment participants report they are diabetic, which is more than twice the estimated prevalence of five percent in the U.S. general population. Elevated random glucose levels (≥ 115 mg/dL) were found among 20 percent of assessment participants--almost three times the estimated level of 6.6 percent in the U.S. general population. And, 46 percent of all participants report a family history (parent or sibling) of diabetes.

While women assessment participants meet national health objectives for Pap tests and mammogram screening, men participants fall short of meeting American Cancer Society recommendations for yearly rectal exams for prostate cancer screening. And, men participants are three times as likely as women to have a high blood pressure reading.

- Accidents, heart disease, cervical and breast cancer, prostate cancer, and diabetes are events or conditions that can be prevented to some degree, or whose effects can be lessened with primary or secondary prevention strategies. Modification of selected behavioral risk factors in a positive manner would decrease the number of deaths resulting from these conditions. For example, regular exercise and maintaining a low fat and low cholesterol diet help to prevent heart disease. And, Pap tests detect cervical cancer, which can be treated more successfully if diagnosed at an early stage.

Barriers to Care

Assessment participants are three times more likely than the US. general population to earn annual household incomes of less than \$10,000. Median household income among assessment participants was \$18,465, compared to the median household income for the U.S. general population of \$29,943.

Assessment participants are almost twice as likely as the US. general population to lack health insurance. Women who participated in the study are almost twice as likely as men to have health insurance coverage.

Adequate income and/or adequate health insurance coverage are important components of health care accessibility. Participants in this study have comparatively less income and less health insurance, and are therefore less likely to obtain health care when needed. A lower utilization rate of health care services was demonstrated among participants, as they visit their doctors less often than the US. general population.

Health Statistics

Health and mortality statistics for American Indians/Alaska Natives often are unavailable from city, county, and state health departments. Special computer runs often are required to obtain requested data. In addition, the accuracy of some information is questionable. Previous research has demonstrated problems with obtaining accurate mortality and morbidity statistics for American Indians/Alaska Natives. Usually, such statistics are under reported. Infant deaths among American Indians/Alaska Natives, for example, are often coded as White on death certificates.

Service Utilization

City and county health departments and community health centers document few clinic users who are American Indians/Alaska Natives. The most commonly mentioned source of health care among project participants is a private physician, followed by an Indian

Health Service clinic, and neighborhood or family health center.

None of the city and county health departments in the study cities provide health services that specifically target American Indian/Alaska Native residents. Furthermore, many health department officials are unaware of the existence of American Indian/Alaska Native residents within their cities. Many health departments (or other designated health agencies) do not collect service utilization data on American Indians/Alaska Natives. For those that do, few service users identify themselves as American Indian/Alaska Native. Among the six sites, only the Houston City Health Department was able to document a level of service utilization (for its Maternal Child Health Services Division) in equivalent proportion to the city's population of American Indians/Alaska Natives.

Leading problems reported by participants when seeking health care include cost, lack of health insurance, and lack of American Indian/Alaska Native health providers. Lack of knowledge of available local health services and the perception that mainstream health providers don't understand their health needs are also problems reported by participants.

Recommendations

The results of this study suggest several areas for improvement in decreasing mortality and associated morbidity among urban American Indians/Alaska Natives in the six study sites. The leading causes of death are all associated with behavioral risk factors that, if modified, would decrease mortality rates for each of the causes. In addition, problems with access to health care services are significant for urban American Indians/Alaska Natives. For whatever reasons, American Indians/Alaska Natives in the study sites do not typically use local health clinics. Private physicians are the most common source of health care among assessment participants, but because of low incomes and a high percentage of urban American Indian/Alaska Native residents without health insurance, health care utilization is less than that in the general population.

The study produced recommendations in two areas: steps needed for local urban American Indian/Alaska Native organizations to pursue Title V funding through the Indian Health Care Improvement Act for additional urban Indian health programs; and those related to the need for increased recognition by health officials at all levels of the health needs of American Indian/Alaska Native residents of urban communities. Major recommendations include:

Title V, Section 504 Funding Issues

1. Health needs assessments should be conducted in all potential sites using standard guidelines and assessment tools, and in accordance with Title V, Section 504, of the Indian Health Care improvement Act.
 2. To accomplish the above, one year contracts of **\$25,000-\$50,000** per location are
-

needed.

3. The Year 2000 Health Promotion and Disease Prevention Objectives should serve as guidelines to obtain baseline data, so as to develop appropriate health objectives and health services for urban Indian health programs.
4. Criteria should be developed for ranking the need among the study sites for Title V funding, in light of limited funds.
5. Technical assistance should be made available to those who receive contracts, for conducting the health needs assessment and for building coalitions among health officials, governing agencies, and urban Indian organizations.
6. In addition to the six cities included in this health needs assessment, there are other U.S. cities with significant numbers of American Indian/Alaska Native residents. An evaluation of the health status and needs of American Indian/Alaska Native people in these additional cities should also be completed. One study, in particular, should include urban areas that may have nearby Indian health facilities (within 30 miles), but where persons in the urban areas still have difficulty obtaining access to health care. Suggested sites include Duluth (MN), Las Vegas (NV), Buffalo (NY), Rapid City (SD), Anchorage (AK), and Syracuse (NY).

Increased Awareness of American Indian/Alaska Native Health Needs

7. Increase awareness on the **part** of city, county, and state health officials. of the need to improve the accuracy of mortality and morbidity statistics for American Indians/Alaska Natives living in urban areas. Indian Health Service Urban Area Coordinators are in strategic positions to provide the type of education and follow through required to work with selected health officials at all three levels to improve the accuracy of morbidity and mortality data for urban American Indians/Alaska Natives.
 8. Increase awareness on the part of health department and community health center administrators of the need for health services among their community's American Indian/Alaska Native population. Health departments and community health centers often provide culturally sensitive health care to ethnic groups who have immigrated to the U.S. from a multitude of countries, but fail to do the same for indigenous people of the U.S. Implementing an educational program, perhaps in conjunction with coalition building, would be helpful in providing information on the American Indian/Alaska Native communities within the cities.
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Shanda Martin, Research Assistant;
Marilyn O'Brien, Data Consultant;
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SECTION 1

INTRODUCTION AND BACKGROUND

BACKGROUND

Purpose of Study

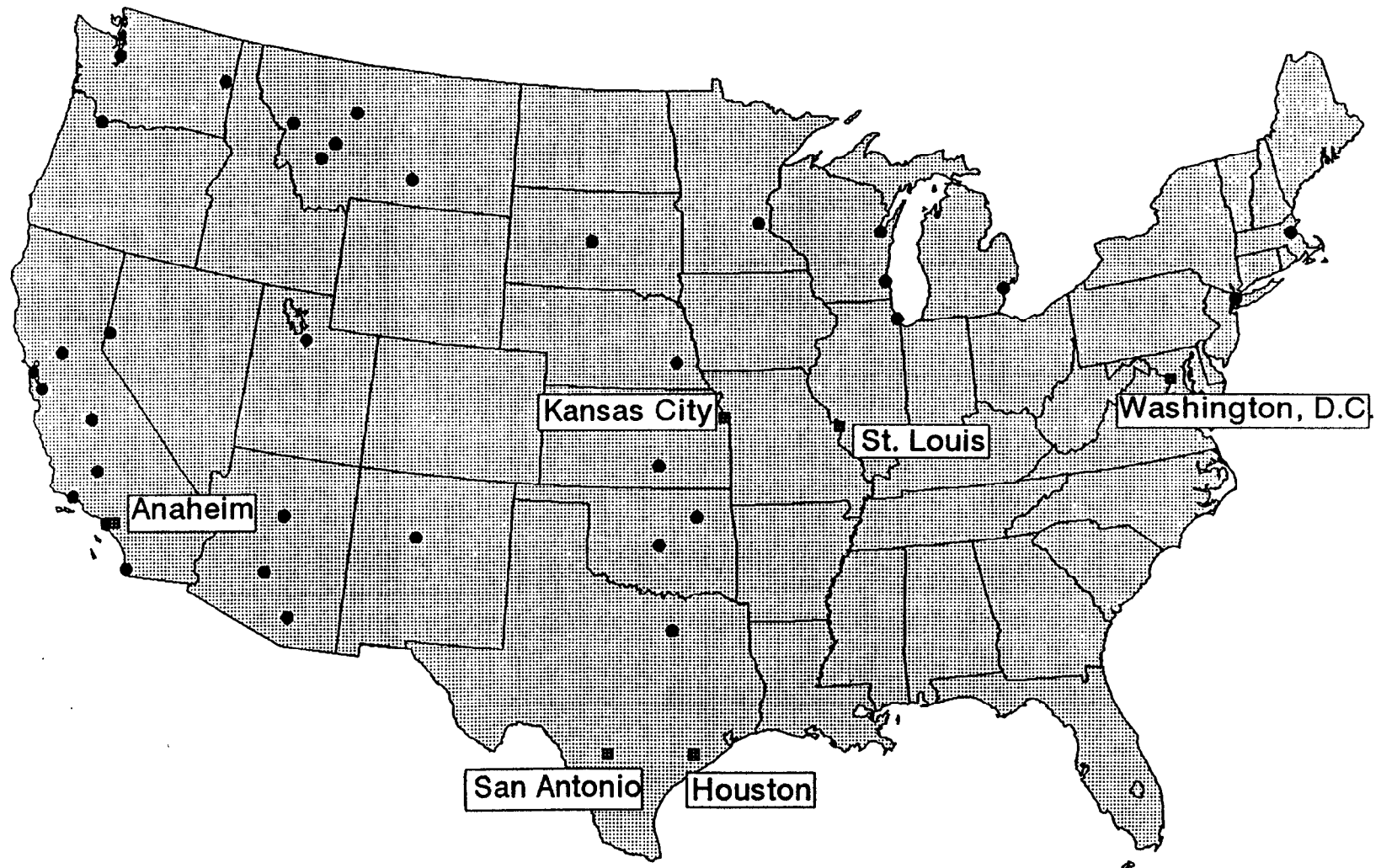
The purpose of this project is to assess the health status, health needs, and health risks of American Indians/Alaska Natives living in selected urban centers with significant numbers of American Indian/Alaska Native residents not currently served by Indian health programs funded by the Indian Health Service. The assessment was conducted according to Section 504 of Title V of the Indian Health Care Improvement Act (as amended). The six urban areas included in this assessment are: San Antonio and Houston, Texas; Anaheim, California; St. Louis and Kansas City, Missouri; and Washington, D.C. Figure 1 .1 provides a graphic display of the study sites and the 33 cities with urban Indian health programs currently receiving Title V funding through the Indian Health Service.

The following is a list of names and locations of urban Indian health programs currently funded through the Indian Health Service.

1. Native Americans for Community Action, Flagstaff, Arizona
2. Indian Community Health Service, Inc., Phoenix, Arizona
3. Traditional Indian Alliance, Tucson, Arizona
4. American Indian Council, Bakersfield, California
5. American Indian Free Clinic, Bellflower, California (Los Angeles)
6. Fresno Indian Health Association, Clovis, California
7. San Francisco/Oakland Indian Health Board, Oakland, California
8. Sacramento Urban Indian Health Project, Inc., Sacramento, California
9. San Diego American Indian Health Center, San Diego, California
10. Indian Health Center of Santa Clara, San Jose, California
11. Santa Barbara Urban Indian Health, Santa Barbara, California
12. American Indian Health Services, Chicago, Illinois
13. Hunter Health Clinic, Wichita, Kansas
14. Boston Indian Council, Boston, Massachusetts
15. Detroit American Indian Health Center, Detroit, Michigan
16. Indian Health Board of Minneapolis, Minneapolis, Minnesota
17. Indian Health Board of Billings, Billings, Montana
18. **North American Indian Alliance, Butte, Montana**
19. **Native American Center, Inc., Great Falls, Montana**
20. Helena Indian Alliance, Helena, Montana
21. Native American Services Agency, Missoula, Montana
22. Nebraska Urban Indian Health Coalition, Lincoln, Nebraska
23. Nevada Urban Indians, Inc., Reno, Nevada
24. Albuquerque Urban Indian Health Center, Albuquerque, New Mexico
25. **American Indian Community House, New York, New York**

Figure 1.1- Cities With Urban Indian Health Programs & Current Assessment Sites

The map displays the United States with state boundaries. Black dots indicate the locations of cities with Urban Indian Health Programs and Current Assessment Sites. Six cities are specifically labeled with text boxes: Anaheim (California), Kansas City (Missouri), St. Louis (Missouri), Washington, D.C. (District of Columbia), San Antonio (Texas), and Houston (Texas). Numerous other dots are scattered across the country, particularly in the western and central regions.



- 26 Portland Indian Health Services, Portland, Oregon
- 27 South Dakota Urban Indian Health, Pierre, South Dakota
28. Dallas InterTribal Center, Dallas, Texas
- 29 Indian Health Care Clinic, Salt Lake City, Utah
30. Seattle Indian Health Board, Seattle, Washington
31. Spokane Urban Indian Health, Spokane, Washington
32. United Amerindian Health Center, Green Bay, Wisconsin
33. Milwaukee Indian Health Center, Milwaukee, Wisconsin

History of Urban Indian Health Programs

More than half of all American Indians/Alaska Natives living in the United States today live in cities and towns, not on reservations (AIHCA, 1991). Prompted by the federal government's official relocation programs, American Indians/Alaska Natives moved to the cities in the **1950s, 60s,** and 70s seeking education, employment and a better life. What they found instead, however, were cultural alienation, prejudice, unemployment, poverty, and ill health.

Twelve cities were designated by the federal government as "relocation cities" during the **1950s**. These included: Chicago; Los Angeles; Denver; San Francisco; San Jose; St. Louis; Joliet; Waukega; Oakland; Cincinnati; Cleveland; and Dallas (Prucha, 1964). Relocation cities contained field offices for the Bureau of Indian Affairs' Relocation Branch. The purpose of the Relocation Branch was to help American Indians/Alaska Natives find employment in the cities.

Once off the reservation, American Indians/Alaska Natives forfeited access to federally provided health care, and because they were unfamiliar or uncomfortable with existing urban health care delivery systems, they often received no health care in the cities. Urban American Indian/Alaska Native leaders responded to the health needs among their people by organizing the first urban clinics for American Indians. They were small, staffed by part-time providers, and often run by volunteers. They filled a need, though, for health care services that were available, affordable, accessible, and most of all, culturally sensitive.

In response to these community based efforts, Congress provided federal funding for urban clinics through the Indian Health Service, starting with the Indian Health Board of Minneapolis. Three more programs were funded in 1973, and five more in 1974. In 1976, Congress passed the Indian Health Care Improvement Act, which recognized the need for a national network of urban Indian health care programs.

Today, 33 urban Indian health programs operate in 41 sites across the country. The range of services provided by the programs varies widely. All urban Indian health programs funded by the Indian Health Service are required to provide referral and

outreach services, while others provide full ambulatory health care. In recent years, many centers have added mental health and substance abuse components. Many programs bill for services and collect from patients and third party payers. Sliding fee scales are common, and no one is turned away. In 1990, nearly 100,000 American Indians/Alaska Natives were served by existing urban Indian health programs nationwide.

Since initial congressional allocations were made in 1978 to implement the Indian Health Care Improvement Act, only one new urban Indian health program has been funded--the Native Americans for Community Action (NACA) Family Health Center in Flagstaff, Arizona. Many U.S. cities that do not currently have urban Indian health programs have sizable numbers of American Indian/Alaska Native residents. Information obtained during the course of this project provides **significant insight into the health status and health needs of selected groups of American Indians/Alaska Natives in six U.S. cities.**

Should additional funding be allocated by Congress for the start up of new urban Indian health programs, the results of this study can be used to help determine the need for such programs. In addition, American Indian/Alaska Native community groups in these cities can use information contained in this report to learn about the health needs in their communities, and to lay a groundwork for community coalition building and organization.

Legislative Requirements

Sections **503** and **504** of the Indian Health Care Improvement Act require that specific information be obtained about American Indian/Alaska Native residents of urban areas before federal funds can be requested to establish urban Indian health programs. Information is required on the following parameters:

1. population of American Indians/Alaska Natives residing in each city;
2. current health status of this population;
3. current health needs of this population;
4. public and private health services and resources available to American Indian/Alaska Native residents of the city; and
5. extent to which American Indian/Alaska Native residents use these resources.

METHODOLOGY

Study Site Selection Criteria

Multiple factors **were** considered when deciding which cities to include in this study, the most important of which included:

1. number of American Indians/Alaska Natives residing in the urbanized area;
2. percentage of American Indian/Alaska Native residents at or below 200% of poverty level; and
3. distance to the nearest Indian health facility (Tribal, IHS, or urban).

These three factors were analyzed in a February, 1991 report by the American Indian Health Care Association, entitled "Potential Sites: Urban Centers Unserved by an Urban Indian Health Program." According to 1980 Census figures (the most recent available for the purpose of that report), fifty seven U.S. cities had at least 1,009 American Indian/Alaska Native residents. By limiting consideration of potential sites to those cities with at least 3,000 American Indian/Alaska Native residents, and considering the other two criteria above, the list of potential sites for study was narrowed in the 1991 report to a total of 19 cities.

The first step in selecting the six sites included in the current project involved an analysis of the 19 cities. The most important consideration in determining study sites remained the numbers of American Indians/Alaska Natives residing in the cities, but additional criteria were added following initial contact and phone conversations with key people in the communities. These criteria include:

1. presence of an existing American Indian/Alaska Native organization willing to participate in the study, and perhaps able to apply for start up funds under Section 504 of the Indian Health Care Improvement Act; and
2. distance to the nearest Indian health facility **accessible** to American Indians/Alaska Natives living in the urban center.

This selection process prioritized the list of study sites to six: Anaheim, California; Washington, DC; Kansas City, Missouri; Houston, Texas; San Antonio, Texas; and St. Louis, Missouri.

Methods Used

Several methods are used in this health needs assessment. They include:

1. analysis of 1990 Census data;

2. analysis of city specific mortality data;
3. on-site meetings with American Indian/Alaska Native community leaders;
4. on-site meetings with city and county health department officials;
5. analysis of selected health indicator data (birth rates, percentage of women receiving prenatal care in the first trimester, percentage of low birth weight infants; and infant mortality rates);
6. analysis of Health Risk Appraisal (HRA) data; and
7. analysis of Community Health Assessment data.

1990 Census Data

Population figures were obtained from the 1990 Census for total numbers of American Indians/Alaska Natives residing in each of the six cities. These population figures reflect the number of American Indian/Alaska Native residents living in the "Urbanized Area", as opposed to the "City" or "Metropolitan Statistical Area" (MSA). "Urbanized Area" more closely reflects the catchment area for those individuals likely to use services in a given urban area. It excludes individuals living in more rural areas of a particular MSA, but includes more than just those individuals living within the central city boundaries. "Urbanized Area" is defined by the U.S. Census Bureau as an area "comprised of one or more places and surrounding densely settled territory with a combined population of 50,000 or more inhabitants".

Mortality Data

Using data collected on American Indian/Alaska Native residents of the US. by the National Center for Health Statistics, the American Indian Health Care Association has examined the causes of death for American Indians/Alaska Natives in selected urban areas. Causes of death for years **1985-1987** among American Indian/Alaska Native residents were determined for the six study sites.

Meetings With American Indian/Alaska Native Community Leaders

Meetings were held with American Indian/Alaska Native community leaders in each of the six sites. These individuals represent a variety of professional backgrounds, including executive directors and program managers of Indian centers, American Indian/Alaska Native educators, business owners, officers of American Indian/Alaska Native organizations, and others identified by community members as influential within the community.

A total of fifteen individuals were interviewed-at least two in each city. The following questions were asked about their communities:

1. Where in your community do American Indians/Alaska Natives receive their health care?
2. What are the major barriers to health care for American Indians/Alaska Natives in your community?
3. Can you identify potential solutions to these barriers?
4. What types of health care services are needed in your community for American Indian/Alaska Native residents?
5. Are there particular neighborhoods in your community with large numbers of American Indian/Alaska Native residents? If so, where are they?

Meetings with City and County Health Department Officials

Meetings were held with health officials in selected study sites to obtain health statistics on American Indian/Alaska Native residents. In the majority of study sites, meetings were held with health department officials. In two sites, however, city-wide ambulatory health care services are managed through another type of agency, i.e., a regional hospital in St. Louis, and an ambulatory clinic system in Washington, DC. In these two sites, meetings were requested with officials representing those agencies. In two of the study sites-St. Louis and San Antonio-health officials had no knowledge of services provided to American Indian/Alaska Native residents, nor did they **collect** or code **utilization information** for American Indians/Alaska Natives. For this reason, on-site meetings with health officials were not held.

During the meetings with health officials, the following information was requested:

1. Does your agency collect health information specifically for American Indians/Alaska Natives?
2. What information is available for American Indians/Alaska Natives on the following health indicators?
 - births
 - percent of pregnant women receiving prenatal care in the first trimester
 - percent of low birth weight infants
 - infant mortality
 - mortality data for other age groups
 - morbidity data
3. Do American Indian/Alaska Native residents of your city use your services? If so, how many?
4. Do you provide services that specifically target American Indian/Alaska Native residents of your community?
5. How would your organization be able to support an urban Indian health program?

Health Indicator Data

Selected health indicator data for American Indians/Alaska Natives were obtained from local and state health departments, including: birth rate; percentage of pregnant women receiving prenatal care in the first trimester; percentage of infants born weighing at or below 2500 grams; and infant mortality rate. State and local health departments routinely maintain these statistics to provide an ongoing analysis of the health of their population. In some areas, however, information on these particular indicators are not routinely analyzed for the American Indian/Alaska Native population, and special computer runs were required to retrieve the data. When asked why these data were not routinely analyzed, the most common response was that it's not done because the overall percentage of American Indians/Alaska Natives in the population is so small.

Birth Rate

Birth rates are provided for American Indians/Alaska Natives in all six study sites, and are compared to birth rates for American Indians/Alaska Natives statewide (where available), as well as to those for the local and state general population.

Percentage of Women Receiving Early Prenatal Care

Initiation of early prenatal care has been identified as an important goal in the Year 2000 National Health Promotion and Disease Prevention Objectives. The recommendation for prenatal care is that by the Year 2000, 80 percent of all pregnant women receive prenatal care beginning in the first trimester.

The percentage of pregnant women receiving early prenatal care is presented for all six study sites, and compared to the percentages for American Indian/Alaska Native women statewide, as well as to those for the local and state general population.

Percentage of Low Birth Weight Infants

Low birth weight is a critical indicator of health status, and the most important predictor of infant mortality. Infants weighing 2,500 grams or less are almost 40 times more likely to die in the first month of life than heavier infants (Shapiro, 1980). The Year 2000 National Health Objectives recommend that low birth weight be reduced to no more than five percent of all live births.

The percentage of low birth weight infants born to American Indian/Alaska Native women is presented for all six study sites, and compared to the percentage for American Indian/Alaska Native women statewide, as well as to those for the local and state general population.

Infant Mortality

The most widely used indicator of maternal and child health is the rate of infant mortality. infant deaths in the first year of life correlate with many risk factors shared by vulnerable populations, including poor maternal health and nutritional status, inadequate health care, poverty, low level of education, and unfavorable environmental conditions (Indian Health Service, 1991).

Infant mortality rates in all six sties are presented for American Indians/Alaska Natives, and compared to those for the American Indian/Alaska Native population statewide, as well as to those for the local and state general population.

Health Risk Appraisals

The Health Risk Appraisal (HRA)-originally developed at the Carter Center in Atlanta and adapted for use with American Indian/Alaska Native communities by Indian Health Service, Aberdeen Area-is a health education/health assessment tool used to determine selected behavioral health risks. The HRA assesses an individual's behavioral risk factors in several health areas--cardiovascular, injury, mental health, alcohol use, diabetes, women's health, and others--and provides a computerized health risk assessment printout to each individual participant. The HRA includes a **40-item** questionnaire, physiological measurements for blood pressure, random glucose, and serum cholesterol, and takes about 20 minutes to administer. (See Appendix C for copy of instrument.) Each participant receives personalized health counseling on his or her health behaviors and health risks.

For the purposes of this project, **HRAs** were conducted in collaboration with American Indian/Alaska Native organizations in each of the six study sites. In three communities, Indian center directors hosted personnel from the American Indian Health Care Association to conduct **HRAs** at their centers. There are no Indian centers in the three other cities, so other American Indian/Alaska Native organizations assisted in planning, scheduling, advertising, and implementing **HRAs** at a variety of locations. Where possible, **HRAs** were conducted at community events, i.e., feasts and PowWows.

Persons participating in the **HRAs** were encouraged to do so by members of the sponsoring community organizations. Each community organization handled its own advertising and recruiting efforts.

Community Health Assessments

Persons participating in the Health Risk Appraisals also completed a Community Health Assessment, a two page form asking questions about their use of health services (where,

how often, and how far they travel to receive care), health insurance coverage, and problems encountered when seeking health care.

Sampling Procedures

American Indian/Alaska Native residents in the majority of U.S. cities do not live in defined neighborhoods or even within particular Census tracts. Such is the case with the six cities included in this study. Because the concentration of American Indian/Alaska Native residents within a given site is not great enough for door-to-door sampling, and because there is no accessible city-wide list of American Indian/Alaska Native residents from which to choose participants, no attempt was made to obtain a random sample. Instead, participants in the study constitute a convenience sample. Persons included in the study were those interested in participating in the assessment, and who also met the criteria for participation, which includes 1) self-identified American Indian/Alaska Native resident of area, and 2) age 18 and older.

Through advertisement (newspaper, radio, newsletter, flyers) and word-of-mouth, American Indians/Alaska Natives were encouraged to participate in the Health Risk Appraisals and Community Health Assessments. Advertisement efforts were more rigorous in some sites than in others. Following relatively low turnouts in the first two cities, raffles were held in the last four sites to increase participation.

A total of 475 persons participated in the Health Risk Appraisals and Community Health Assessments across all six study sites. Assessment participants totaled 65 in Kansas City, 80 in Washington, DC., 108 in Houston, 119 in Anaheim, 31 in San Antonio, and 72 in St. Louis. All assessment participants were at least 18 years of age, and the vast majority under age 65. (A more in-depth demographic profile of assessment participants is included in Section 2.)

DATA ANALYSIS

Data Entry

Health Risk Appraisal data were entered into the computer at the time of assessment using an optical scanner. A coding system was developed for entry of The Community Health Assessment data, for which a single **research assistant did the majority of the data entry.**

Data Analysis

"Epi Info, Version 5.01a" an epidemiological software package jointly developed by the Centers for Disease Control (CDC) and the World Health Organization (WHO), was used to analyze the **Health Risk Appraisal and Community Health Assessment data.**

Frequencies were computed for selected behavioral risk factors, and totals were compared by city and with national standards. Individual risk factors are grouped together within specific health categories.

Comparative Data

Comparative data are presented in almost all instances. Depending on the data, comparisons are made with information **from** the following sources: U.S. Bureau of the Census; the 1990 Behavioral Risk Factor Surveillance System (BRFSS); Year 2000 National Health Promotion and Disease Prevention Objectives; the National Health Interview Survey; and the National Health and Nutrition Examination Survey.

LIMITATIONS OF STUDY

Unavailable Data

Lack of health information on American Indians/Alaska Natives at county, city, and state health departments is the most significant barrier to the accuracy and completeness of this assessment. Availability of American Indian/Alaska Native health data varies from one study site to another. Some health departments, or designated agencies, routinely collect and analyze health information on American Indian/Alaska Native residents. Other departments collect health data specific to American Indians/Alaska Natives, but do not extract this information for analysis. Others collect health related information by race only sporadically, if at all.

Data Misclassification

Death certificates are an important source of information about the health status of selected groups of people. Accurate information about racial and ethnic groups, however, can be obtained only if race is correctly coded on the certificates. Previous investigation has examined the accuracy of race classification for American Indians/Alaska Natives. In some states, death certificate information results in the calculation of death rates that underestimate American Indian/Alaska Native mortality. **Other** studies have found that a large proportion of infants recorded as Indian on certificates and who die in the first year of life, are recorded as members of another race (usually White) on death certificates (Sugarman, 1992).

Self-Selected Participants

American Indian/Alaska Native residents in each of the six cities chose to participate in Health Risk Appraisals and Community Needs Assessments by responding to advertisements, and through recruitment efforts on the part of community organizations. Because participants are self-selected, study results are not representative and do not

necessarily reflect the health status and health needs of American Indians/Alaska Natives community-wide. Only a random sample can ensure that results are generalizable to the entire population. Random samples are extremely difficult to obtain for studies with urban American Indian/Alaska Native communities--the numbers are too small, and people are reluctant to participate in research because of prior negative experiences,

Few Numbers of Participants in Some Cities

Attempts were made to recruit at least 100 participants in each of the six study sites. This was possible in only two of the sites-Houston and Anaheim. In the other four sites, fewer than 100 persons participated. Participation rates in the study varied from site to site for a variety of reasons, including:

- intensity of local recruitment efforts;
- accessibility of locations where HRAs were conducted;
- level of interest among community members and potential participants; and
- community cohesiveness.

Local Recruitment Efforts

Advertising and recruitment were done at each of the six study sites. American Indian/Alaska Native centers, other American Indian/Alaska Native organizations, and interested individuals all contributed to recruitment efforts across the six sites. The intensity of recruitment efforts varied from site to site according to the interest, energy, and available time on the part of the organization and/or individuals involved, and available mechanisms through which to recruit (newsletter, newspaper, radio, etc.).

Accessibility of Locations Where HRAs Were Conducted

Established Indian centers have ongoing programs and meetings throughout the week which draw American Indian/Alaska Native residents to the centers. People are accustomed to going to the centers for services, meetings, socialization, feasts, etc., and most centers are located in areas that are convenient to the population they serve. In the three study sites that have Indian centers-Kansas City, Anaheim, and St. Louis--a certain number of participants was guaranteed because of ongoing traffic through the centers. In the three sites without centers, more aggressive efforts were made to choose locations in which to conduct Health Risk Appraisals and Community Health Assessments. Some sites, however, proved to be inconvenient to potential participants. Although the best options available at the time, some locations proved to be geographically distant and not easily accessible by public transportation.

Level of Interest

The level of interest among community members and potential participants varied from site to site. Several American Indian/Alaska Native organizations involved in this study have discussed the possibility of starting clinics in their cities for American Indian/Alaska Native residents, but have been unsure about how to go about it. As it is in the general population, health care is an important issue in the American Indian/Alaska Native community. Study sites with higher participation rates were also those with individuals interested in the outcome of this study and the possibility of establishing an urban Indian health program.

Community Cohesiveness

Levels of community cohesiveness are difficult to measure, but the effects can be felt. Study sites with greater levels of **community** cohesiveness tend to have more organized events, in the form of PowWows, feasts, other social events. Community members know each other, plan events together, have both informal and formal groups and organizations, and help each other in times of need. Indian centers often serve as a focus for community activities, and as a hub for information sharing. Level of community cohesiveness varied among the six study cities.

SECTION 2

OVERALL FINDINGS IN SIX STUDY SITES

BACKGROUND

The Indian Health Service routinely receives health data on all American Indians/Alaska Natives living in the United States from the National Center for Health Statistics (NCHS). In order to analyze trends in health status, IHS selects for analysis only those records pertaining to persons living in the 33 reservation states. In some states, data are used for all American Indians/Alaska Natives living in the state; in some, just for American Indians/Alaska Natives living in reservation counties; and in others, just for American Indians/Alaska Natives using IHS or Tribal health facilities (O'Brien, 1991). When health statistics are used to describe the health status of American Indians/Alaska Natives in the U.S., the information is limited, then, to those who fall within these categories.

Some data, however, have been analyzed just for urban American Indians/Alaska Natives. Using data collected on American Indian/Alaska Native residents of the U.S. by the National Center for Health Statistics, the American Indian Health Care Association has examined the causes of death for American Indians/Alaska Natives in selected urban areas. Causes of death for years 1985-1987 among American Indian/Alaska Native residents were determined for 34 cities in which Indian Health Service funded urban Indian health programs operate. For years 1985-1987, the leading causes of death for these urban American Indians/Alaska Natives are ranked in order as:

1. Heart disease
2. Cancer
3. Accidents
4. Cirrhosis
5. Stroke
6. Homicide
7. Diabetes

A reminder, however, that the above data are based on a select group of people--those American Indians/Alaska Natives residing in 34 US. cities. Mortality data for American Indians/Alaska Natives are often unavailable at the state level, and typically less available at the local level. Even with data that are collected, many state and regional data analysts state that mortality data for American Indians/Alaska Natives are often inaccurate because of miscoding of race at the time of death (Sugarman, 1992).

OVERALL FINDINGS

For purposes of comparison, selected information is presented on all six cities involved in the study: **Kansas City; Washington, D.C.; Houston; Anaheim; San Antonio; and St. Louis.** Included are: **1990 population figures; general findings from meetings with American Indian/Alaska Native community leaders; general findings from meetings with**

city and county health department officials; and analysis of Health Risk Appraisals and Community Health Assessments.

Census Data

Urbanized Area Census data were obtained for five of the six study sites. The sixth site--Anaheim, California--is not considered an urbanized area, but is one of three cities that comprise the Anaheim, Santa Ana, Garden Grove Metropolitan Statistical Area. Anaheim is also the county seat of Orange County, is primarily urban. Census figures for Anaheim represent those for Orange County, as a whole.

Table 2.1. 1990 Census Population of Six Study Sites.

Urbanized Area	Total Population	American Indian/Alaska Native Population	Percentage of AI/AN to Total Population
Anaheim, CA	2,410,556*	12,165*	0.50%
Washington, DC	3,363,031	9,040	0.27%
Houston, TX	2,901,851	8,141	0.28%
Kansas City, MO	1,275,317	6,073	0.48%
San Antonio, TX	1,129,154	4,094	0.36%
St. Louis, MO	1,946,526	3,729	0.19%

Data from the U.S. Census Bureau, 1990

*Data for Orange County

General Findings from Meetings with American Indian/Alaska Native Community Leaders.

Several common themes emerged in responses given by American Indian/Alaska Native community leaders to questions about the health needs of their community members. These include:

1. Many American Indians/Alaska Natives do not seek needed health care services;
2. Health insurance is often unaffordable, even for persons who work full-time;
3. Cost, lack of health insurance, and lack of knowledge about available services are most often cited as barriers to health care;
4. American Indian/Alaska Native community leaders in cities with active **American Indian/Alaska Native organizations and/or identifiable**

communities have a better sense of their communities' health needs than those without such organizations or community cohesion, regardless of the size of the American Indian/Alaska Native population residing within that city;

5. It is common for American Indian/Alaska Native community leaders to establish an informal network of assistance (financial, transportation, etc.) in order to assist persons in need of emergency health care; and
6. American Indian/Alaska Native leaders are aware of many people living in urban communities who travel hundreds of miles back to their home reservations to **obtain** health care services.

General Findings from Meetings with Health Department Officials

1. Some health departments or agencies collect American Indian/Alaska Native specific health information and others do not. Some don't ask for racial or ethnic information at all, while some ask, but exclude American Indian/Alaska Native as a possible response category;
2. Some health departments collect health **information** on American Indians/Alaska Natives, but do not extract information for analysis, usually because the overall numbers are too few;
3. Race specific service utilization data are often unavailable at community clinics and health departments. Communicable disease data are often the only category of utilization data that are maintained according to race;
4. Some data are of questionable accuracy, i.e., no American Indian/Alaska Native infant deaths in the state of Texas for years 1988-1990;
5. Many health department officials are unaware of existing American Indian/Alaska Native communities within their city, county, or state.

Demographics

Figure 2.1 reflects selected demographic information for assessment participants in the six study sites. The total number of persons participating in the **HRAs** and Community Health Assessments across all six study sites was 475. Sixty-nine Tribes are represented in the participant group. The four Tribes most often represented are: Cherokee; Choctaw; Navajo; and Sioux. These four, though, still comprise less than 33 percent of the total, indicating the diversity of Tribal representation among participants.

**Figure 2.1 • Demographics of Assessment participants
All Six Study Sites**

*	Age	Median Range	41 18-87
*	sex	Female Male	63.2% 36.8%
*	Employment	Unemployed Employed Student Retired Homemaker	13.7% 56.3% 6.4% 14.3% 9.2%
*	Education	Some High School High School Grad College Grad	14.7% 23.1% 13.8%
*	Ethnicity	Full-blood < Full-blood	25.3% 74.7%
*	Tribes (69 Total)	Cherokee Choctaw Navajo Sioux Other	16.3% 5.8% 5.3% 5.3% 67.3%

Number of Participants = 475

Health Risk Appraisal Data

Comparisons of HRA data are presented on selected health categories, including:

- cardiovascular risk factors (smoking, high blood pressure, obesity, high cholesterol, sedentary lifestyle);
- injury risk factors (lack of **seatbelt** use, drinking and driving, binge drinking);

- diabetes risk factors;
- diabetes prevalence;
- suicide;
- men's health (prostate cancer screening); and
- women's health (breast and cervical cancer screening).

Cardiovascular Risk Factors

Selected cardiovascular risk factors are compared among the six cities and with national levels. Definitions of these risk factors are as follows:

Smoking • currently smoking cigarettes

High Blood Pressure • one blood pressure reading with a systolic reading of 140 mm Hg or greater OR diastolic reading of 90 mm Hg or greater

Obesity • 20 percent and over of desirable body weight, as recommended in Metropolitan Life Insurance height/weight tables

High Cholesterol • ≥ 240 mg/dL

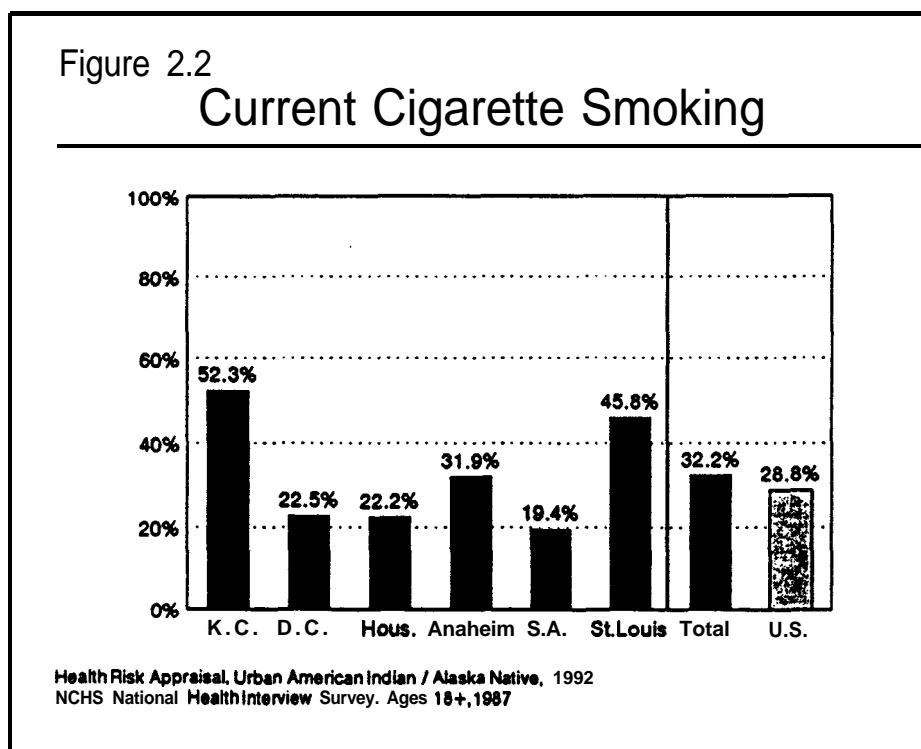
Sedentary Lifestyle • exercising < 3 times per week for a 20 minute time period

The Behavioral Risk Factor Survey (BRFSS) provides 1990 comparative data for the state general population on smoking, obesity, and lack of exercise. The National Center for Health Statistics (NCHS) provides national comparative data for cholesterol levels and blood pressure readings using data obtained from the National Health and Nutrition Examination Surveys (NHANES).

For cholesterol comparisons, it should be noted that Health Risk Appraisals report cholesterol results for blood specimens obtained from a finger stick, resulting in a "blood cholesterol" value, while the NHANES report cholesterol results for serum derived from blood specimens obtained from a venipuncture, resulting in a "serum cholesterol" value.

Cigarette Smoking

Cigarette smoking-a causative agent in the development of numerous illnesses, including heart disease, lung cancer, and chronic lung disease-varies significantly within the American Indian/Alaska Native community from region to region and from Tribe to Tribe (Lando, 1992). Figure 2.2 reflects the proportion of current cigarette smokers in each of the study cities.

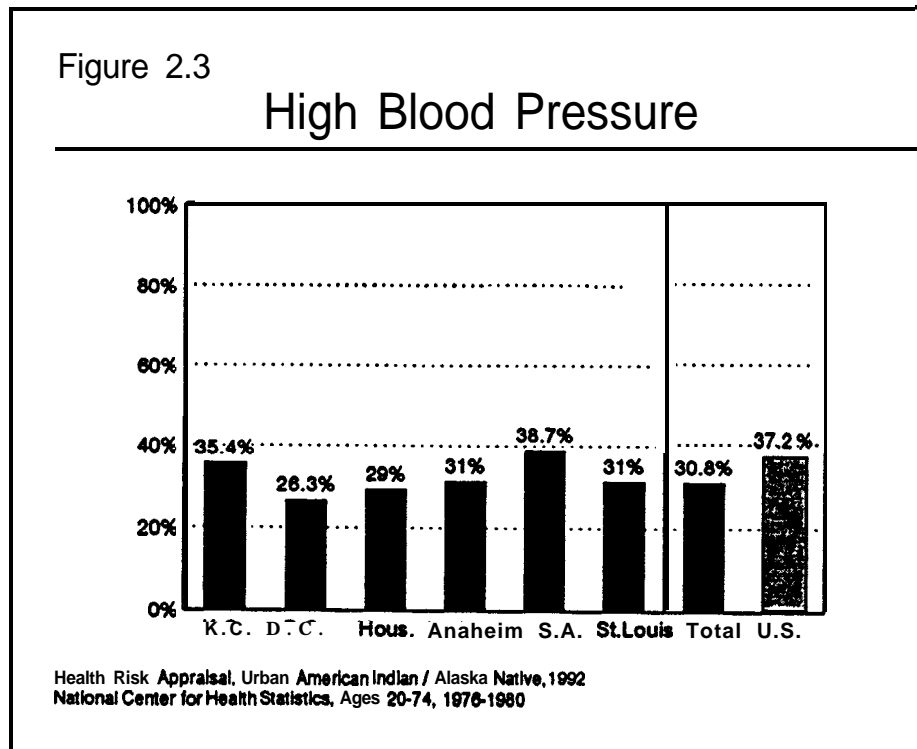


One-third of all assessment participants smoke cigarettes, compared to a U.S. total of 29 percent. The proportion of smokers varies greatly between sites, from 52 percent in Kansas City to 19 percent in San Antonio.

Among participants, an association exists **between** smoking status and employment. The odds of assessment participants who are unemployed to report they are a current smoker are 3.5 times greater than for those employed full time.

High Blood Pressure

A high blood pressure reading is defined as one (screening) reading with a systolic value of ≥ 140 mm HG or a diastolic value of ≥ 90 mm Hg. High blood pressure is a primary risk factor for heart disease, stroke, and kidney disease. Figure 2.3 reflects the proportion of persons in each of the study cities with a high blood pressure reading.



Thirty-one percent of all assessment participants have an elevated blood pressure reading, compared to a U.S. total of thirty-seven percent. Only ten percent of urban participants report taking blood pressure medicine.

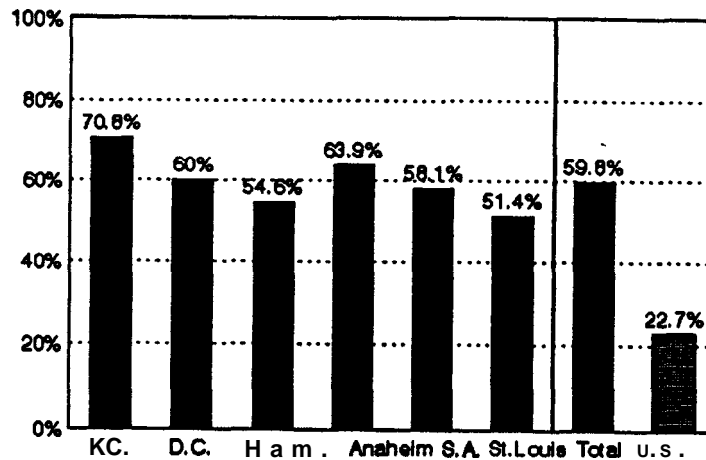
Among assessment participants, an association exists between high blood pressure and gender. The odds of having a high blood pressure reading are three times greater for men participants than for women.

Obesity

Obesity is defined as 20 percent or more above an optimum weight for height ratio (ADA Reports, 1989), and is associated with heart disease, gall bladder disease, diabetes, and certain types of cancers. Figure 2.4 reflects the percentage of persons in each city who are obese.

Figure 2.4

Obesity

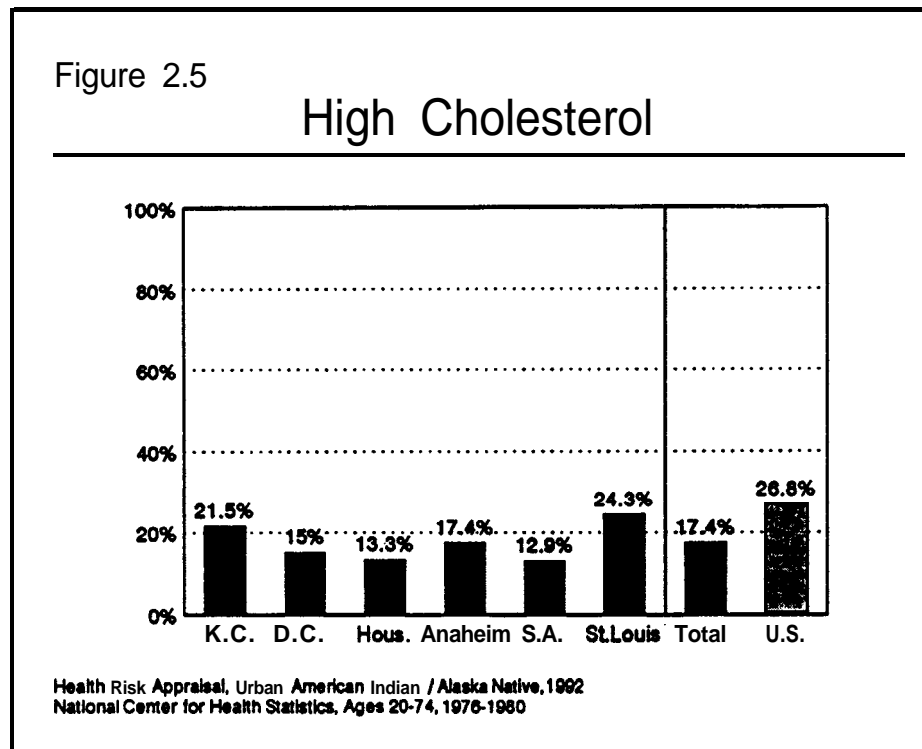


Health Risk Appraisal, Urban American Indian/Alaska Native, 1992
BRFSS, 1990, U.S. Median, Ages 20-74

Sixty percent of assessment participants are obese, compared to a U.S. total of 23 percent. Because of its high prevalence in urban American Indian/Alaska Native communities, the high percentage of obesity is cause for concern. However, there is controversy about the definition of obesity. Standards incorporated into the Health Risk Appraisal used in this project are based on 1959 Metropolitan Life height/weight tables. **Less strict standards** have been developed favoring use of a "body mass index" (BMI), a metric measurement that compares height with weight (U.S. Department of Agriculture, 1990). These guidelines also provide different standards according to age, and allow persons age 35 and older to maintain a heavier weight and still be considered healthy. The prevalence of obesity among assessment participants would be lower if the more liberal standards were incorporated into the Health Risk Appraisal software program.

High Cholesterol

Cholesterol is a type of fat which builds up in the arteries and increases risk of heart disease and subsequent heart attack and stroke. A high cholesterol reading is defined as 240 **mg/dL** or greater. Figure 2.5 reflects the percentage of persons in each of the cities with a high cholesterol reading.



Seventeen percent of assessment participants have a high cholesterol reading, compared with a U.S. total of 27 percent. Prevalence among the cities ranges from a low of 13 percent in San Antonio to a high of twenty-four percent in St. Louis.

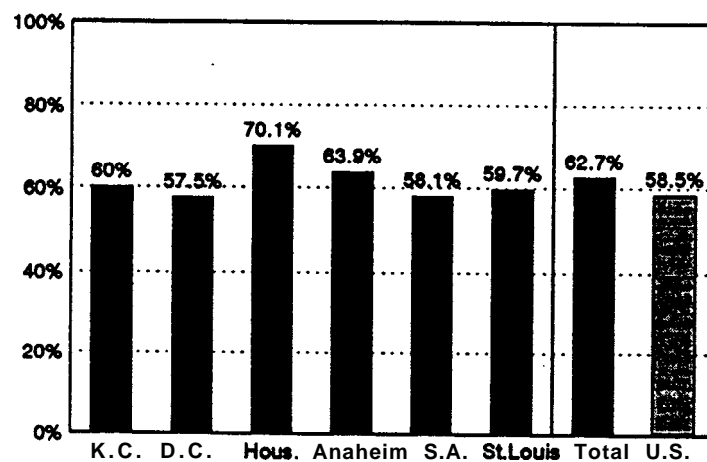
Borderline high cholesterol is defined as 200-239 **mg/dL**. The prevalence of borderline high cholesterol among participants is 28.3 percent, compared to 30.3 percent for the U.S. total population.

Sedentary Lifestyle

A **sedentary** lifestyle is defined as exercising less than three times a week for a 20 minute time period. Exercise helps to control weight, improve cardiovascular health, alleviate anxiety, and also contributes to more efficient metabolism of blood sugar in diabetics. Lack of exercise and obesity often go hand in hand, and contribute to the development of heart disease and diabetes. Figure 2.6 reflects the proportion of persons in each of the cities who have a sedentary lifestyle.

Figure 2.6

Sedentary Lifestyle



Health Risk Appraisal, Urban American Indian / Alaska Native, 1992
Behavioral Risk Factor Survey U.S. Median, 1990

Sixty-three percent of assessment participants do not exercise enough, compared to a U.S. total of 59 percent. A larger proportion of women participants than men lead a sedentary lifestyle as sixty-nine percent of women and fifty-three percent of men do not exercise enough .

Injury Risk Factors

Selected injury risk factors are compared among the six cities, and with national levels. Definitions of these risk factors are as follows:

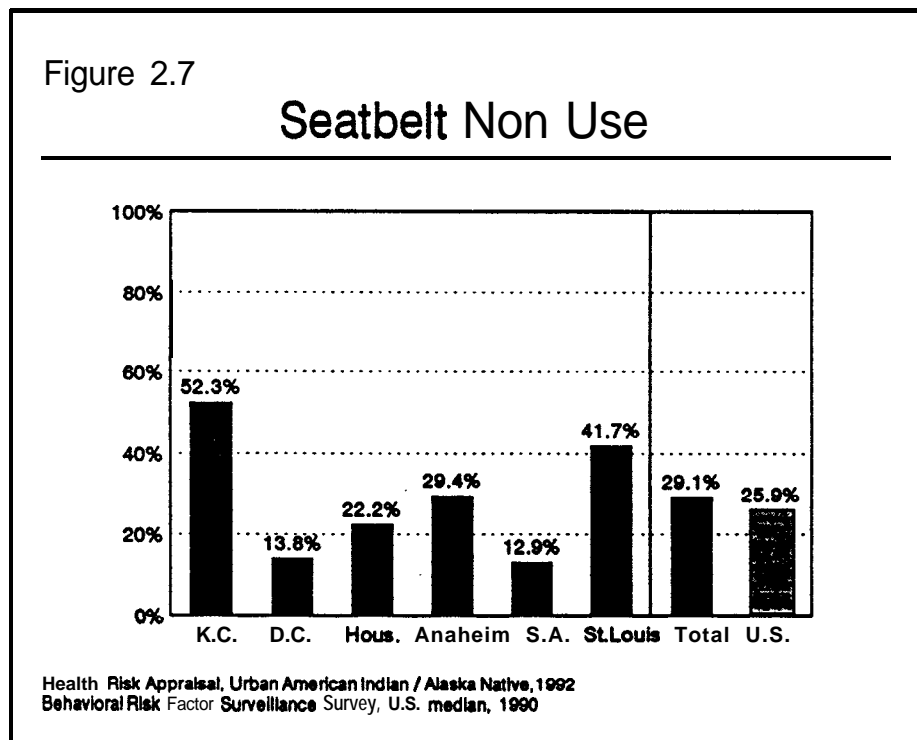
Lack of **Seatbelt Use** - seatbelts used **<60%** of the time¹

Drinking and Driving - operating a motor vehicle after drinking too much alcohol, or riding as a passenger with someone who has drunk too much, at least one time in the past month

Binge Drinking - Consumption of at least 5 drinks on one or more occasions during the past month

Seatbelt Use

Accidents are a leading cause of death for American Indians/Alaska Natives, and wearing seatbelts decreases mortality from car accidents. Figure 2.7 reflects the number of people in each city who do not use seatbelts.



¹<60% or "rarely, now and then, and half" for Health Risk Appraisal data, compared with "sometimes, seldom, or never" for BRFSS data.

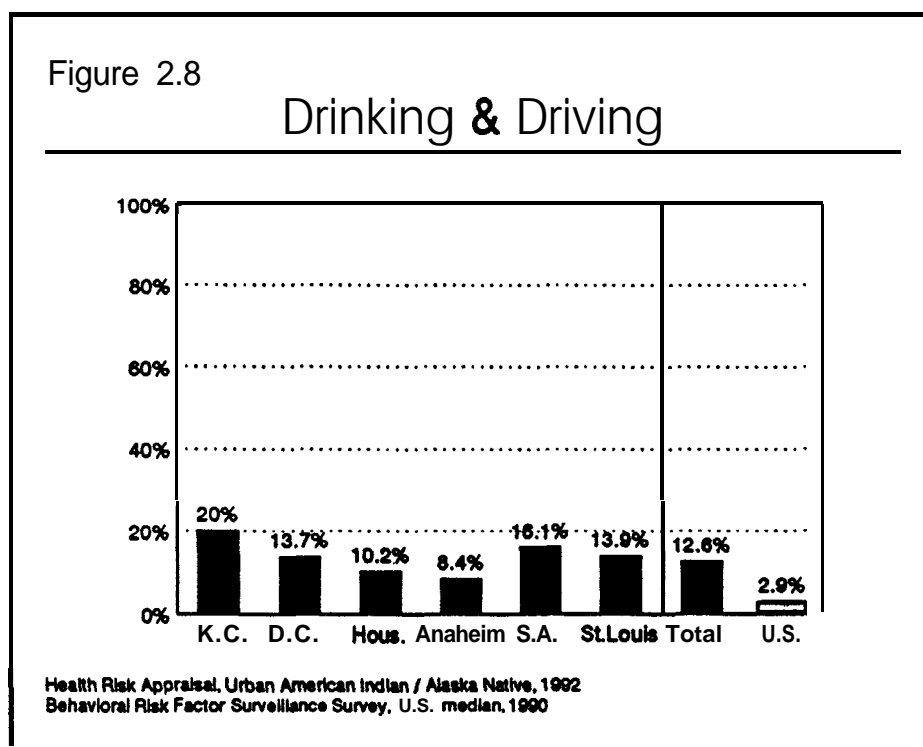
Thirty percent of assessment participants generally do not use seatbelts while driving or riding in a car. This ranges from a low of 13 percent in San Antonio to a high of 52 percent in Kansas City, and compares to a U.S. total of 26 percent.

Among participants, use of seatbelts was strongly associated with years of formal education. The odds of participants with a high school diploma or less of using their seatbelts are three times less than for those with a college education.

An additional risk factor in automobile accidents is driving over the speed limit. **Twenty-seven** percent of assessment participants report driving an average of **6-10** miles per hours over the speed limit, while ten percent drive at least **11** miles per hour over the speed limit.

Drinking and Driving

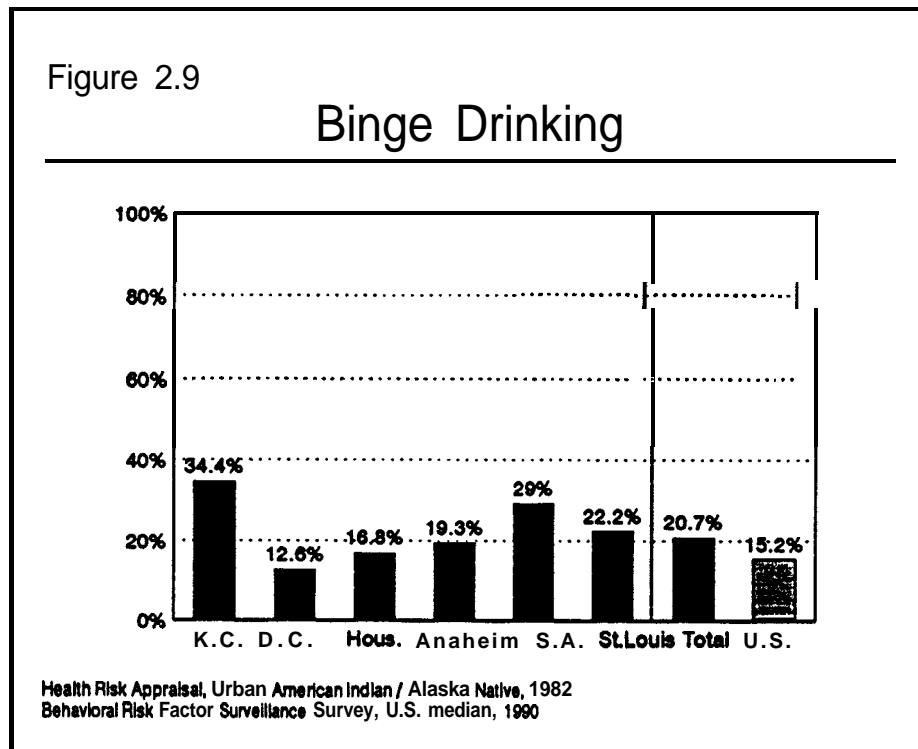
Fatalities from motor vehicle accidents are often associated with alcohol use. Figure 2.8 reflects the proportion of persons in each city who drink and drive.



At least once per month, thirteen percent of assessment participants drive after drinking alcohol, or ride in a motor vehicle with a driver who has been drinking. This compares to a U.S. total of 3 percent, and ranges from a low of eight percent in Anaheim to a high of 20 percent in Kansas City.

Binge Drinking

Figure 2.9 reflects the proportion of persons in each city who binge drink.



Binge drinking (5 or more alcoholic drinks on one occasion) is 30 percent higher among assessment participants than among the U.S. total population. Twenty-one percent of participants binge drink, ranging from a low of thirteen percent in Washington, D.C. to a high of thirty-four percent in Kansas City. The proportion of the U.S. total population who binge drink is 15 percent.

Heavy alcohol use is associated with accidental injury, cardiovascular disease, birth defects, and cirrhosis. Pregnant women who binge drink increase the risk for birth defects among their newborn infants. Of the 300 women participants, only seven report they might be pregnant; of these seven, only one reported one or more episodes of binge drinking during the past month.

Diabetes Risk Factors

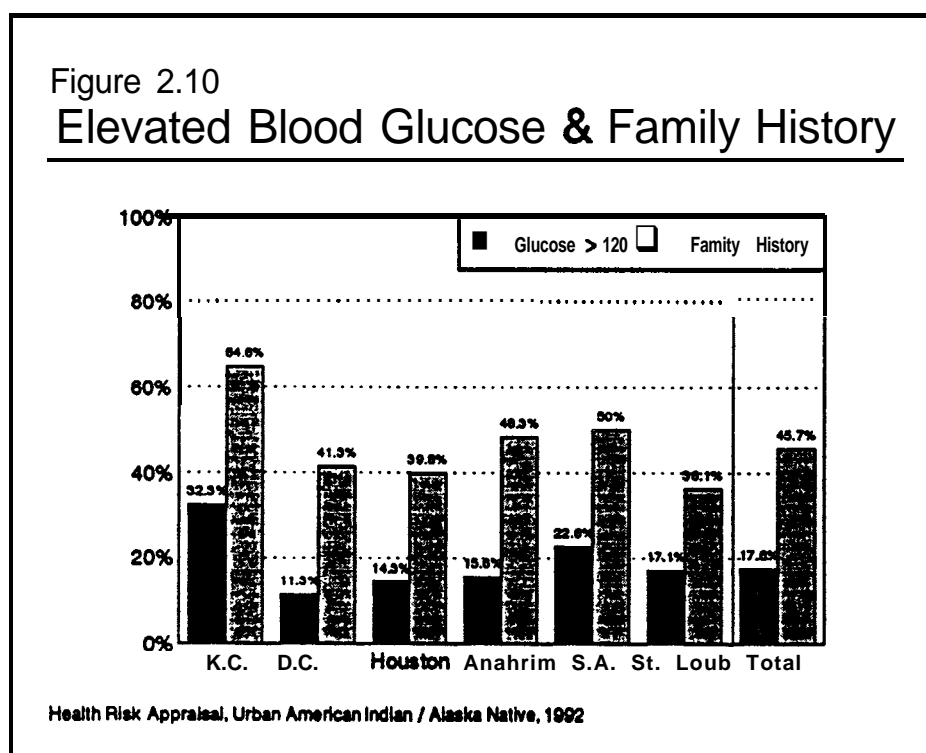
Selected diabetes risk factors are compared among the six cities. Definitions of these risk factors are as follows:

High Random Blood Glucose Level - one reading of 115 mg/dL or greater²

Family History - reporting at least one close relative (mother, father, brother or sister) with diabetes

Comparative data are available from the American Diabetes Association on the prevalence of random glucose values in the U.S. general population.

Figure 2.10 reflects proportions of persons with high random glucose levels and those with a family history of diabetes in each of the six cities.



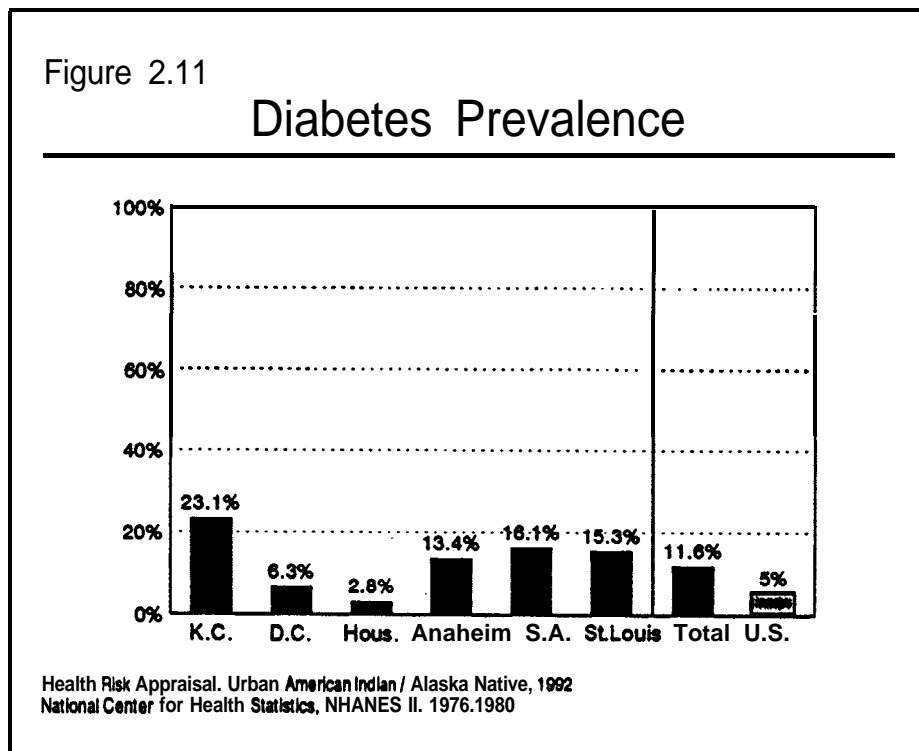
Twenty percent of assessment participants have a blood glucose of 115 mg/dL or above, while forty-six percent have a close relative with diabetes.

²According to American Diabetes Association guidelines, a positive screening for random blood glucose is ≥ 115 mg/dL.

While one elevated blood glucose reading is not diagnostic of diabetes, it is reason for concern and further evaluation. The American Diabetes Association has estimated that 6.6 percent of the U.S. total population age 20-74 has random blood glucose levels of 115 mg/dL or higher (McNamara, 1992).

Diabetes Prevalence

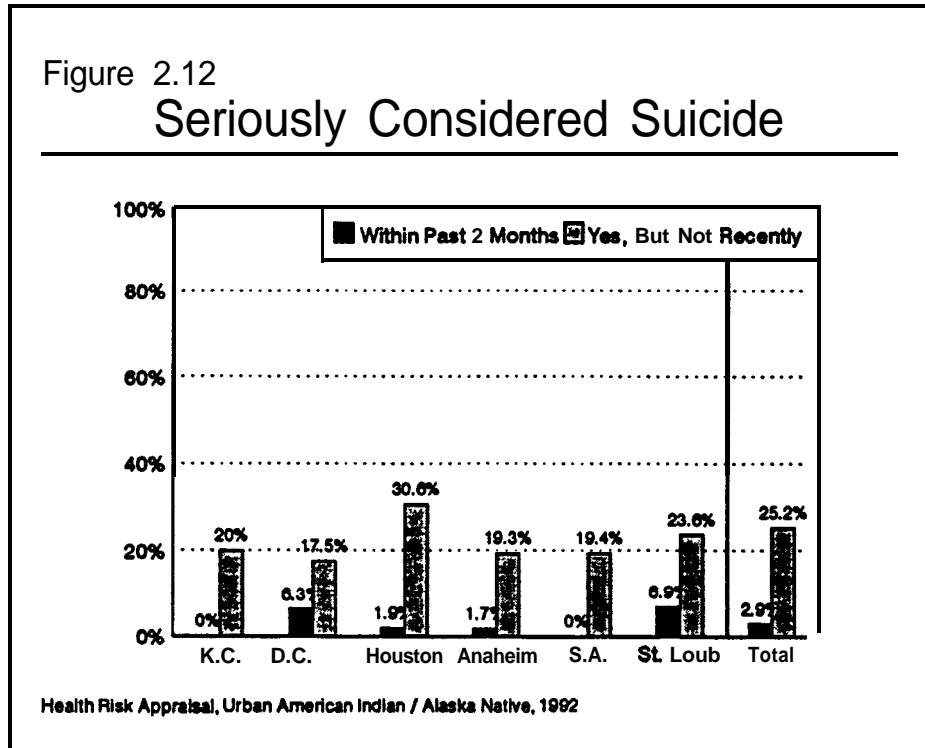
Figure 2.11 reflects the percentage of persons who report having been told they have diabetes.



Twelve percent of assessment participants report they have diabetes. This compares to an estimated U.S. prevalence of 5 percent, and ranges from a low of 2.8 percent in Houston to a high of twenty-three percent in Kansas City. The overall prevalence of 12 percent among participants closely compares to that of a 1987 study, which found a 13 percent prevalence of previously diagnosed diabetes for those 19 years of age and over among American Indians/Alaska Natives living on reservations (NCHS, 1990).

Suicide Ideation

Figure 2.12 reflects the percentage of persons in the study who have seriously considered suicide at sometime in the past.



Twenty-five percent of assessment participants have seriously considered suicide in the past, and three percent have considered it within the past two months. Of the men in the study, 19 percent had seriously considered suicide, but not recently, while two percent had considered suicide in the past two months. For women, 24 percent had seriously considered suicide at some point in the past, while four percent had considered it within the past two months.

While the findings of this study indicate that more women than men have seriously considered suicide at some time in the past, successful suicide among Native Americans is primarily among young men (May, 1987).

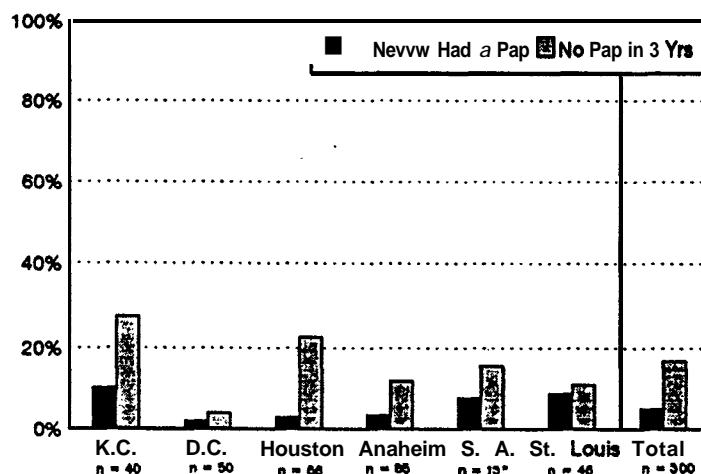
Women's Health

Cervical Cancer Screening

Three hundred (63 percent) of assessment participants are women age 18 and over. Breast and cervical cancer screening are important preventive health measures for women. The American Cancer Society (ACS) recommends that women receive regular Pap tests for cervical cancer screening at age 18 or when sexual activity begins, whichever comes first. While the decision on frequency of Pap tests is left to the woman and her physician, the ACS recommends annual Pap tests until three consecutive negative test results have been obtained, then at least every three years, and more often for women with selected risk factors. Figure 2.13 reflects the lack of Pap test use among women age 18 and over.

Figure 2.13

Lack of Pap Test Use, Age 18+



Health Risk Appraisal. Urban American Indian / Alaska Native, 1992
• Accuracy questionable because of small "n".

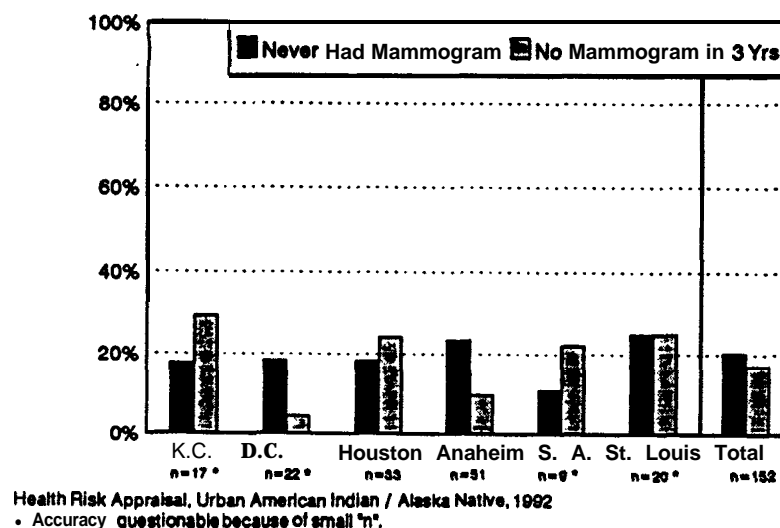
Five percent of women assessment participants have never had a Pap test, while seventeen percent have not had a Pap test within the last three years. Recommendations included in the Year 2000 Health Objectives for the Nation state that by the year 2000, at least 95 percent of all women age 18 and over have had a Pap test at least once, and that 85 percent have had a Pap test within the most recent three years (leaving an unscreened percentage of five percent and 15 percent, respectively).

Breast Cancer Screening

The American Cancer Society recommends that women obtain their first mammogram by age 40, and have repeat mammograms every one to two years until age 50, when yearly mammograms are recommended. (Women with a family history of breast cancer should get a baseline mammogram at age 35.) One hundred and fifty-two project participants (32 percent) are women age 40 and over. Figure 2.14 reflects the percentage of women age 40 and over who have never had a mammogram or who have not received one within the past three years.

Figure 2.14

Lack of Mammogram Use, Age 40+



Twenty percent of women assessment participants age 40 and over have never had a mammogram, while seventeen percent have had one, but not within the past three years. The Year 2000 National Health Objectives recommend that 80 percent of women age 40 and over receive a clinical breast examination and mammogram.

Among participants, regular mammogram use is strongly associated with health insurance coverage. The odds of women participants age 40 and over with health insurance of having had a mammogram within the past three years are almost three times greater than those for women without health insurance coverage.

An important risk factor in the development of breast cancer is a family history of breast cancer. Nine percent of women participants age 18 and over, and 11 percent of those age 40 and over, report a family history (mother or sister) of breast cancer.

Additional behavioral risks for breast cancer include never having had a breast exam by a health care provider, and not performing self breast exams (SBE). Nineteen percent of women assessment participants age 18 and older report never having had a physician or other health care provider examine their breasts, and twenty-eight percent report they rarely or never perform SBE.

Men's Health

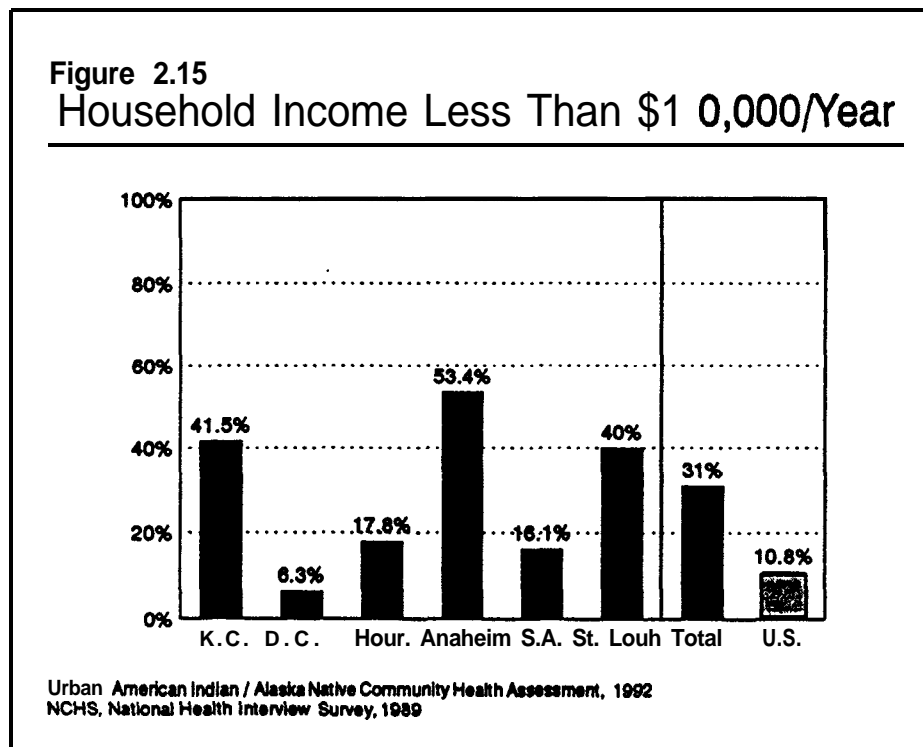
The American Cancer Society recommends that men age 40 and older receive yearly exams to screen for prostate cancer. The recommended screening procedure is a digital rectal exam performed by a physician. The incidence of prostate cancer increases as one grows older, and, if detected in its early stages, can be successfully treated with surgery.

Of the 475 project participants, 101 (21 percent) are men age 40 and older. Of these, only 25 percent have received a rectal exam within the last year. Thirty-five percent of male participants age 40 and older have had a rectal exam in the past, but not within the past three years, while ten percent report never having had a rectal exam at all.

Community Health Assessment Data

Income

Access to health care is greatly affected by the ability to pay for it. Figure 2.15 reflects the percentage of persons in all six cities whose household income is less than \$10,000 a year.



Assessment participants are three times more likely than the U.S. total population to report household earnings of less than \$10,000 a year. Thirty-one percent of participants report household earnings of less than \$10,000 a year, compared to a U.S. total of 11 percent. Incomes of American Indians/Alaska Natives are lowest in Anaheim, where 53 percent of participants have annual household incomes of less than \$10,000.

Income levels among different groups are often compared according to the median of the group. A median income is the midpoint of a range, where half of all people earn less and half earn more than the median. According to the 1990 Census, the 1989 median household income for the U.S. general population was \$29,943. Table 2.2 reflects median income for participants in the six study cities.

Table 2.2 Median Income for Cities

	Kansas City	D.C.	Houston	Anaheim	San Antonio	st. Louis	Total
Median income	\$13,437	\$33,393	\$27,708	\$9,354	\$15,833	\$13,889	\$18,465

As reflected in Table 2.2, median income among study cities varies widely, ranging from \$9,354 in Anaheim to \$33,393 in Washington, D.C. The wide range in median incomes is due to several reasons. One important reminder, however, is that participants of this study comprise a convenience sample, not a random sample, and so do not necessarily reflect selected characteristics of the group as a whole. For example, assessment participants in Washington, D.C. are highly educated (37 percent have college or advanced degrees), and almost all (90 percent) are employed. Income levels reflect this, with a median income of over \$33,000. Participants in Houston also reflect a high level of education (21 percent are college graduates), employment (64 percent are employed), and income level (\$27,708).

On the lower end of the income continuum are Anaheim participants. Many participants in Anaheim were persons using services offered at the Southern California Indian Center, Inc. The Center's Social Services program is very active, providing services to low income community residents. Many participants decided to participate in the health needs assessment while at the Center's Social Services office. In addition, several participants were recruited from the Senior program offered weekly at the Center. Seniors are typically retired, and on fixed incomes. The lower incomes of these two groups of participants are reflected in the lower overall median household income in Anaheim of \$9,354.

Health Insurance

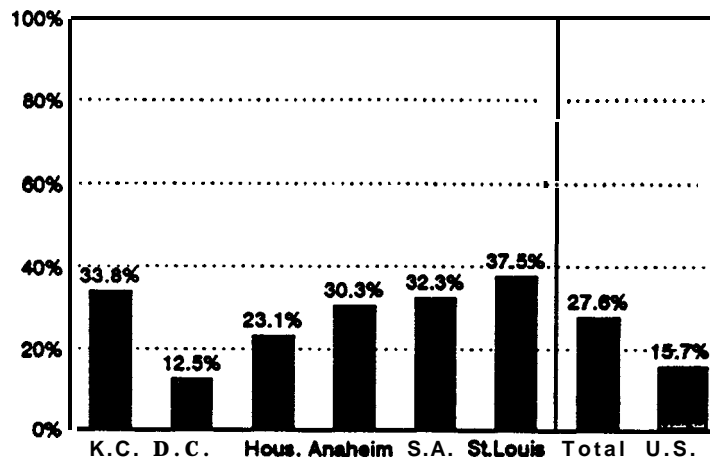
Health insurance coverage is a crucial factor in one's ability to obtain adequate health care. In the U.S., private health insurance coverage is closely linked to employment status. Medicare is available for those over age 65, and Medicaid is available for the poor or disabled.

Over the past decade, private insurance coverage has become less accessible for a variety of reasons: loss of jobs; higher cost of health care; and higher premiums charged to employers and employees. Many people who are employed part time or at lower paying jobs are not able to pay high insurance premiums, and often elect to have no health insurance coverage. Others with health insurance can't afford the high

deductibles they incur when health care is obtained, so put off seeking needed health care services. Figure 2.16 reflects the percentage of persons who are not covered by health insurance.

Figure 2.16

No Health Insurance Coverage



Urban American Indian / Alaska Native Community Health Assessment, 1992
NCHS, National Health Interview Survey, 1989

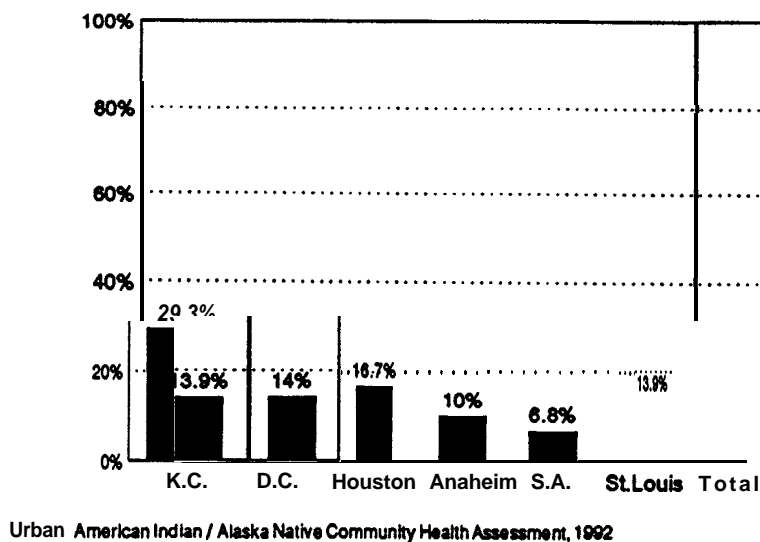
Twenty-eight percent of project participants lack health insurance, compared to a U.S. total of 16 percent. American Indians/Alaska Natives in St. Louis are especially affected by lack of health insurance coverage, with 37.5 percent reporting no coverage.

Among participants, health insurance coverage is associated with gender. The odds of women participants having health insurance coverage are almost twice those of men. Health insurance coverage is closely linked to employment status, and women participants are almost twice as likely to be employed as men.

Distance Traveled to Visit Doctor

The distance one travels to the doctor is an important component of determining accessibility of health care. Figure 2.17 reflects the proportion of persons who travel 30 or more miles to visit a physician.

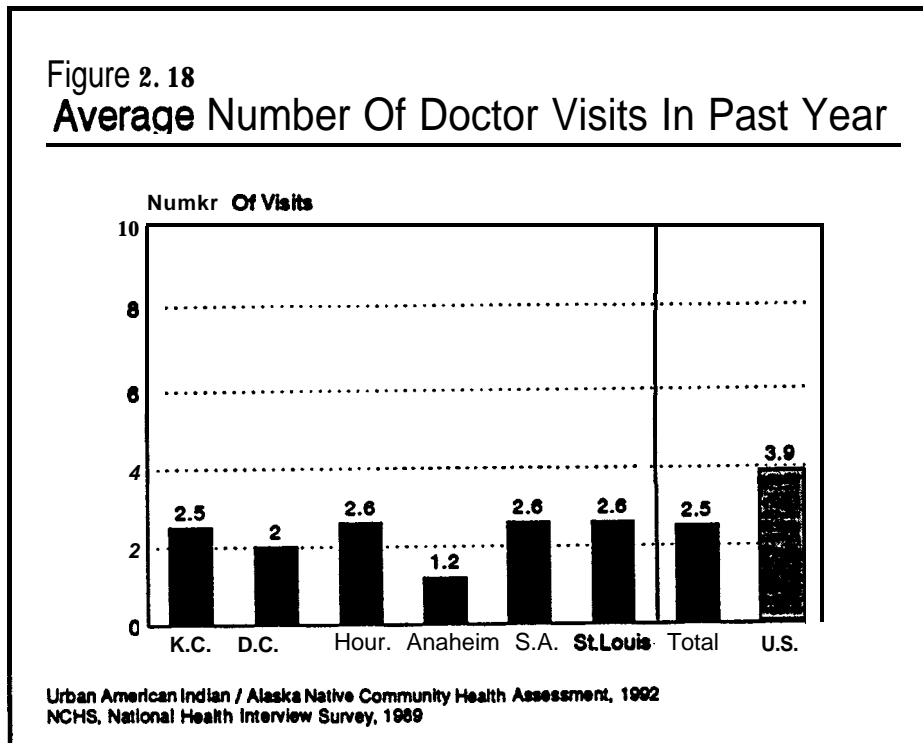
Figure 2.17
Travel 30 Or More Miles To Physician Or Clinic



Fourteen percent of assessment participants travel distances of 30 miles or more to go to their doctors for health care, ranging from a low of 11 percent in Washington, D.C. to a high of 29 percent in Kansas City. Six percent of all participants travel 50 or more miles to visit a doctor.

Average Number of Doctor Visits a Year

Use of physician services also reflects health care accessibility. Figure 2.18 reflects the average number of office visits made by assessment participants to see a physician each year.



Assessment participants visit the doctor on an average of 2.5 times a year, compared to an average among the U.S. general population of almost 4 times a year. Mortality and morbidity statistics indicate that American Indians/Alaska Natives are no more healthy than the general population. In fact, for many illnesses just the opposite is true. Urban American Indians/Alaska Natives receive less health care, in terms of quantity, than the U.S. general population.

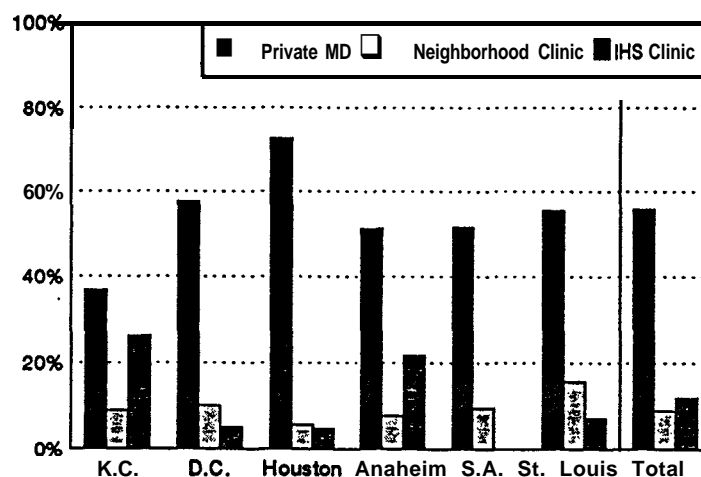
Types of Facilities Used for Health Care

Participants were asked to identify the type of facility where they receive their health care. -Possible responses included:

- private physician or clinic
- neighborhood/family health center
- employer operated clinic
- health department
- hospital outpatient clinic
- school clinic
- Indian Health Service facility
- Tribal clinic
- hospital emergency room
- other (please specify)

Figure 2.19

Where Respondents Receive Health Care



Urban American Indian / Alaska Native Community Health Assessment, 1992

The three most commonly used types of facility are reflected in Figure 2.19. Assessment participants most often receive their health care from a private physician. This, along with lower incomes and fewer persons having health insurance coverage, could explain the lower utilization of health care among urban American Indians/Alaska Natives as reflected in Figure 2.18.

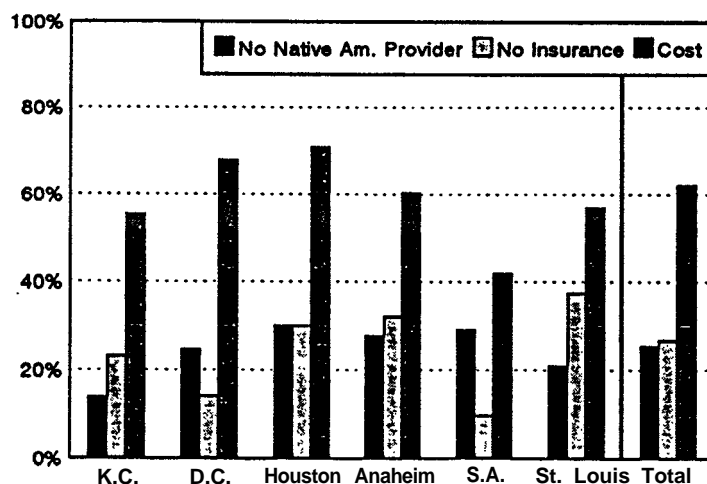
Problems Experienced When Seeking Health Care

Participants were asked to identify any problems they had experienced when seeking health care. Possible responses included:

- not knowing what health care services are available
- cost
- lack of health insurance
- too far to travel
- lack of transportation
- lack of trust in health care providers
- none (or too few) American Indian/Alaska Native health care providers
- lack of understanding of the health needs of American Indians/Alaska Natives
- other (please specify)

Cost was the number one problem mentioned by participants in seeking health care. Lack of health insurance and lack of American Indian/Alaska Native health care providers are also perceived as significant problems. The three most commonly mentioned problems when seeking health care across the six sites are graphically presented in Figure 2.20.

Figure 2.20
Leading Problems When Seeking Health Care



Urban American Indian / Alaska Native Community Health Assessment, 1992

Table 2.3 presents a complete breakdown, by city, of problems experienced by assessment participants when seeking health care.

Table 2.3 Leading Problems When Seeking Health Care.

Problem	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis
Cost	55.4%	67.9%	71.0%	60.3%	41.9%	56.9%
No insurance	23.1%	14.1%	29.9%	31.9%	9.7%	37.5%
No AI/AN providers	13.8%	24.4%	29.9%	27.6%	29.0%	20.8%
Not Knowing Avail Services	12.3%	21.8%	28.0%	22.4%	29.0%	19.4%
Providers don't know needs of N.A.s	23.1%	20.5%	15.9%	21.6%	22.6%	13.9%
No trust	12.3%	16.7%	29.0%	24.1%	12.9%	15.3%
Distance	21.5%	11.5%	19.6%	31.0%	9.7%	15.3%
No transportation	15.4%	3.8%	6.5%	19.8%	3.2%	6.9%

SUMMARY OF OVERALL FINDINGS

Health Status

Cardiovascular Health

Heart disease is the leading cause of death among urban American Indians/Alaska Natives. Selected cardiovascular risk factors are more prevalent among assessment participants than among the U.S. general population, including smoking, obesity, and lack of exercise. High blood pressure and high cholesterol levels, however, are less prevalent for participants than for the U.S. general population.

Injury Prevention

Accidents are the third leading cause of death for urban American Indians/Alaska Natives. Selected injury risk factors are higher among assessment participants than among the U.S. general population, including lack of **seatbelt** use, drinking and driving, and binge drinking. Lack of **seatbelt** use among participants is twice that of the U.S. population, and drinking and driving is four times that of the U.S. population.

Diabetes Prevalence and Risk Factors

Twelve percent of assessment participants report they are diabetic, which is over twice that found in the U.S. general population (5 percent). Elevated random glucose levels (**≥ 115 mg/dL**) were found among 20 percent of participants, almost three times that found in the U.S. general population (6.6 percent). And, 46 percent of all participants report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants meet the Year 2000 National Health Objective for having ever had a Pap test (95 percent), and come close to meeting the Health Objective for having had a Pap test within the past three years (83 percent compared to the recommended 85 percent).

Women assessment participants age 40 and older meet the Year 2000 National Health Objective for mammogram screening. Eighty percent of women participants age 40 and older have received a screening mammogram, which is the recommended screening level.

Men's Health

Men assessment participants age 40 and older fall short of meeting American Cancer Society recommendations for yearly rectal exams for prostate cancer screening. Only 25 percent of all men participants age 40 and older have received a rectal exam within the past year.

Barriers to Care

Income

Assessment participants are three times more likely than the U.S. general population to earn annual household incomes of less than \$10,000. Median household income among participants was \$18,465, compared to the median household income for the U.S. general population of \$29,946.

Health Insurance Coverage

Assessment participants are almost twice as likely as the U.S. general population to lack health insurance, while women participants are almost two times more likely than men to have health insurance coverage.

Health Care Utilization

City and county health departments and community health centers document few clinic users who are American Indians/Alaska Natives. The most commonly mentioned source of health care among project participants is a private physician, followed by an Indian Health Service clinic, and neighborhood or family health center.

Assessment participants visit their doctors less often than the U.S. general population. Lower incomes and less health insurance coverage most likely account for at least part of the lower health care utilization rates among participants.

SECTION 3
FINDINGS BY CITY

FINDINGS BY CITY

In this section, selected information is presented on participants in each city involved in the assessment, including: history and background; 1990 total and American Indian/Alaska Native population figures; city-wide mortality data; meetings with American Indian/Alaska Native community leaders, health department **officials**, and community health center administrative personnel (in some sites); selected health indicator data; study participant demographic characteristics; and Health Risk Appraisal and Community Health Assessment results. Information on **types** of services provided by the American Indian centers involved with the assessment in three of the cities is included in Appendix A.

Because of the likelihood that information for each city will be of interest to persons or groups specific to that location, an attempt is made in this section to present enough data and explanatory information on each city for that subsection to stand on its own. Because **of** this, some information presented may be repetitive **if read in its entirety**.

A. KANSAS CITY, MISSOURI

History and Background

The area along the Missouri River which is now Kansas City, Missouri was at one time the home of the Kansa (Kaw) Tribe (Terrell, 1971). Having originally come from the **Ohio River region, the Kansa eventually settled at the confluence of the Kansas and Missouri Rivers.** This general region continued to be their homeland until European domination and annihilation.

Northwestern Missouri is also the homeland of the **Oto** and Missouri Tribes. Early historical records indicate that both these Tribes migrated from the vicinity of Green Bay, **Wisconsin**, where they were closely affiliated with the Winnebago (Eagle/Walking Turtle, 1991). Today, the two Tribes have a combined Tribal council--the **Otoe-Missouria Tribal Council**--located in Red Rock, Oklahoma.

American Indians/Alaska Natives from more **than 50 Tribes** now live in the state of **Missouri**. As in most urban areas, American Indian/Alaska Native residents of Kansas City represent a wide range of Tribes.

For the purposes of this project, the Heart of America Indian Center, Inc. in Kansas **City** hosted two staff persons from the American Indian Health Care Association in February, 1992, to conduct Health Risk Appraisals and Community Health Assessments. Additional information on the services offered at the **Heart of America Indian Center, Inc.**, can be found in Appendix A.

Census Data

Table 3.1 a reflects 1990 population figures for the Kansas City urbanized area.

Table 3.1a. American Indian/Alaska Native and General Population, Kansas City, 1990.

Total Population	American Indian/Alaska Native Population	Percentage of AI/AN to Total
1.275317	6,073	0.48

Data from 1990 US. Census

Meetings with American Indian/Alaska Native Community Leaders

Meetings were held in Kansas City with American Indian/Alaska Native community leaders having backgrounds in government, program management, social services, and education. These individuals include: Chester Ellis, Executive Director of the Heart of America Indian Center, Inc.; William Simpson, Program Manager of the Morning Star Outreach Program at the Heart of America Indian Center, Inc.; and John Wilson, board member of the Heart of America Indian Center, Inc., and employed by the U.S. Environmental Protection Agency as a liaison to selected Tribes in the Midwest. The following is a summary of their responses to questions about the health needs of American Indians/Alaska Natives **in their community**:

1. Sources of health care for American Indians/Alaska Natives in Kansas City include:
 - a. Truman Medical Center's outpatient clinics;
 - b. Samuel U. Rodgers Community Health Center; and
 - c. the Indian Health Service at Haskell Institute in Lawrence, Kansas (45 miles away).
2. Major barriers to health care for American Indians/Alaska Natives in Kansas City are:
 - a. cost;
 - b. lack of trust in health care providers;
 - c. cultural insensitivity among mainstream providers;
 - d. lack of transportation;
 - e. lack of knowledge about what **services** are available; and
 - f. long distances to travel for care.
3. Potential solutions to these barriers are:
 - a. start an urban clinic for American Indians/Alaska Natives in Kansas City; and
 - b. ensure that (at least some) mainstream providers are American Indian/Alaska Native.
4. Types of health care services needed for American Indian/Alaska Native residents in Kansas City are:
 - a. dental;
 - b. preventive health services;
 - c. obstetrics and prenatal care;

- d. health education and parenting classes;
- e. management of chronic illnesses; and
- f. generalized acute medical care.

5. Particular neighborhoods in Kansas City where large numbers of American Indians/Alaska Natives live are:

While the population of American Indians/Alaska Natives is fairly well dispersed throughout the Kansas City area, the northeastern neighborhoods of the city have greater numbers of American Indian/Alaska Native residents. (This information is anecdotal only, with no available supportive census tract population figures.)

Meetings with Health Department Officials

A meeting was held on February 26, 1992 at the City of Kansas City (MO) Health Department with Gerald Hoff, Chief of Communicable Disease and Laboratory Services, and Sidney Bates, Director of Maternal Child Health. On request, service utilization statistics were provided for American Indian/Alaska Native residents seeking services at the Kansas City Health Department. Dr. Hoff explained that health department utilization statistics are maintained by race only for selected services, typically those funded by the federal government (i.e., tuberculosis and sexually transmitted disease services). Records for use of other services are not kept according to race. Table 3.2a reflects available service utilization information of Kansas City Health Department services by American Indians/Alaska Natives.

Table 3.2a Use of Kansas City (MO) Health Department Services by American Indian/Alaska Native Residents. 1991.

Program	Visits in 1991
Tuberculosis	1
HIV Testing and Counseling	42
Other Sexually Transmitted Diseases	31
Total	74

Data from City of Kansas City (MO) Health Department

- Table 3.2a presents only a partial use of health department services by Kansas City American Indians/Alaska Natives. Still, total communicable disease visits number only **74**. This indicates that, for whatever reasons, the Kansas City Health Department does

not provide health services to many of the 6,073 American Indian/Alaska Native residents of the area.

Meetings with Community Health Center Officials

A meeting was held on February 26, 1992, with Lou Catalano, Executive Assistant to the Director of the Samuel U. Rodgers Community Health Center. The Health Center is located about a mile from the Heart of America Indian Center, Inc., and provides comprehensive ambulatory health care services to Kansas City residents on a sliding fee basis.

On request, Ms. **Catalano** retrieved information on the Center's service utilization by American Indians/Alaska Natives. For the previous calendar year (**1991**), a total of 32 persons who identified themselves as American Indian/Alaska Native used the Center's services. The Center has reached out to many of the city's ethnic groups, as evidenced by signs and brochures in several languages: Russian; Ethiopian; Somalian; Spanish; Cambodian; and Vietnamese. Ms. **Catalano** does not think that a clinic is needed that specifically targets American Indians/Alaska Natives because she feels American Indians/Alaska Natives have assimilated within the mainstream population, accounting for the few numbers using the Center's services. Information obtained during the meetings with Kansas City American Indian/Alaska Native community leaders does not support this view.

Mortality Data

Using data supplied by the National Center for Health Statistics, an analysis of causes of death among American Indians/Alaska Natives in Kansas City was completed by the American Indian Health Care Association for years 1985-1987. Table **3.3a** reflects the causes of death for Kansas City American Indians/Alaska Natives for the three years. While providing information on the leading causes of death among Kansas City American Indians/Alaska Natives, the mortality rates themselves are unstable because of the few numbers of deaths reported (**n=13**).

Table 3.3a American Indian/Alaska Native Mortality Rates From Selected Causes, Kansas City, Missouri, 1985-1987.

Cause of Death	Mortality Rate (Per 100,000 Persons)
Diseases of the Heart	14.73
Malignant Neoplasms	9.82
Accidents	4.91
Chronic Liver Disease & Cirrhosis	4.91
Homicide	4.91
Other Causes	24.55
ALL CAUSES (n= 13)	63.83

Data from NCHS, 1985-1987, analyzed by American Indian Health Care Association, 1992. Mortality rates are crude rates, and not adjusted according to age.

Heart disease is the number one cause of death among Kansas City American Indians/Alaska Natives, followed by cancer, accidents, liver disease, and homicide.

Health Indicator Data

Table 3.4a reflects the most recent data available for selected health indicators. To improve the accuracy of rates and percentages for the selected indicators, three years of data were compiled for American Indian/Alaska Native residents. All Races data are reported for a single year--1990.

Table 3.4a. Selected Health Indicator Data. Kansas City (MO) American Indian/Alaska Native; State of Missouri American Indian/Alaska Native; Kansas City (MO) All Races; State of Missouri All Races.

Health Indicator	American Indian/Alaska Native, Data for 3 years*		All Races, Data for 1990	
	Kansas City	MO State	Kansas City	MO State
Birth Rate (live births per 1000 population), per year	6.2	11.2	18.3	15.5
% Births to women who received prenatal care in 1st trimester	60.7	63.8	72.9	77.6
% low birth weight infants (≤ 2500 Grams)	5.4	5.7	9.0	7.1
infant mortality rate (infant deaths per 1000 live births), per year	10.0 (n=2)	9.0 (n=6)	11.1	9.4

Data obtained from Missouri State Center for Health Statistics

*Data for 3 year period 1989-1991

Infant mortality rates are important indicators of the health status of selected groups of people. While the infant mortality rate among Kansas City American Indians/Alaska Natives is almost twice that of the Kansas City general population, the rate is unstable because of the small overall number of American Indian/Alaska Native reported infant deaths in Kansas City.

The birth rate among Kansas City American Indians/Alaska Natives is one-third that of the Kansas City general population, while the percentage of American Indian/Alaska Native women residing in Kansas City who receive prenatal care in the first trimester is much less (61 percent) than that in the Kansas City general population (73 percent).

Health Risk Appraisals

Health Risk Appraisals were conducted in Kansas City at the Heart of America Indian Center, Inc. February 24-28, 1992. Health Risk Appraisal data are presented on selected health risk behaviors for which comparative data are available. In the **area** of cardiovascular health, information is presented on smoking, sedentary lifestyle, and obesity. In the area of safety, data are presented on lack of **seatbelt** use, drinking and driving, and binge drinking. The 1990 Missouri Behavioral Risk Factor Surveillance System (BRFSS) provides comparative data.

Additional information is presented in the areas of women's health, men's health, diabetes, income, health insurance coverage, and access to health care issues. Where available, comparative data are provided using data from the National Center for Health Statistics and the Year 2000 Health Promotion and Disease Prevention Objectives for the Nation.

Participant Characteristics

Figure 3.1 a reflects selected demographic characteristics of persons participating in the assessment in Kansas City.

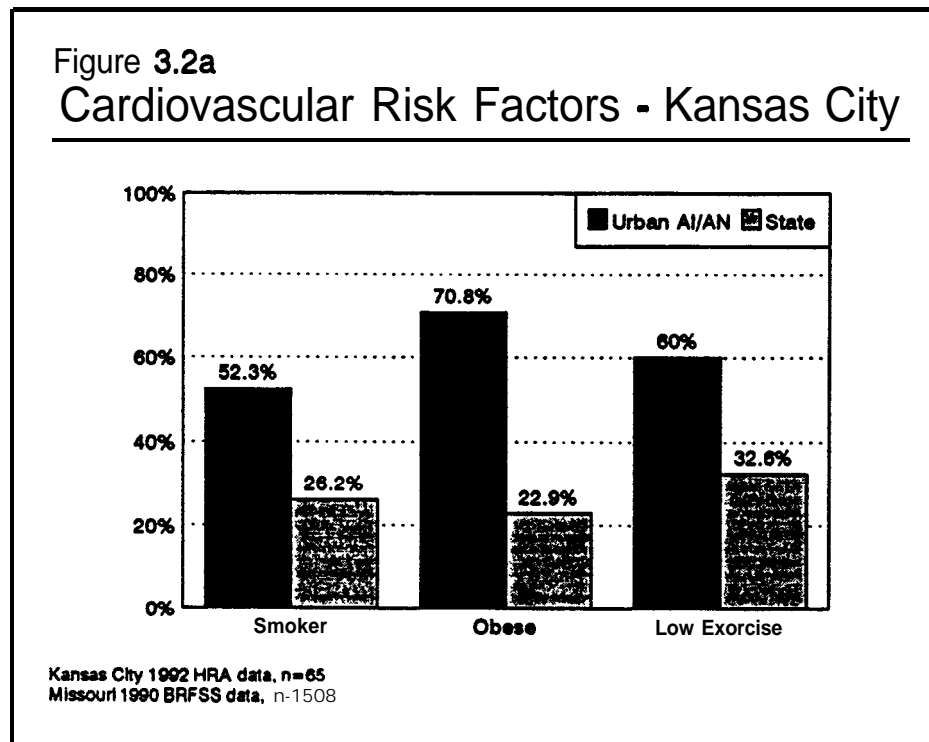
Figure 3.1a • Demographics of Kansas City Assessment participants			
*	Age	Median Range	39 18-70
*	Sex	Female Male	61.5% 38.5%
*	Employment	Unemployed Employed Student Retired Homemaker	21.6% 47.7% 6.2% 13.8% 10.8%
*	Education	Some High School High School Grad College Grad	31.7% 23.8% 7.9%
*	Ethnicity	Full-blood < Full-blood	32.3% 67.7%
*	Tribes (19 Total)	Creek Kickapoo Potawatomi Other	12.3% 12.3% 7.7% 67.7%
Number of participants = 65			

The median age of Kansas City project participants is 39, and sixty-two percent are women. Just under half of all participants are employed full or part time, and 22 percent

are unemployed. Eight percent have college degrees. Thirty-two percent are full blood American Indian/Alaska Native. The three Tribes most often represented—Creek, Kickapoo, and Potawatomi—comprise just 32 percent of the total population, indicating the diversity of Tribal representation in the Kansas City American Indian/Alaska Native community.

Cardiovascular Risk Factors

Figure 3.2a reflects the proportion of Kansas City assessment participants with selected cardiovascular risk factors compared to those of the Missouri state general population.



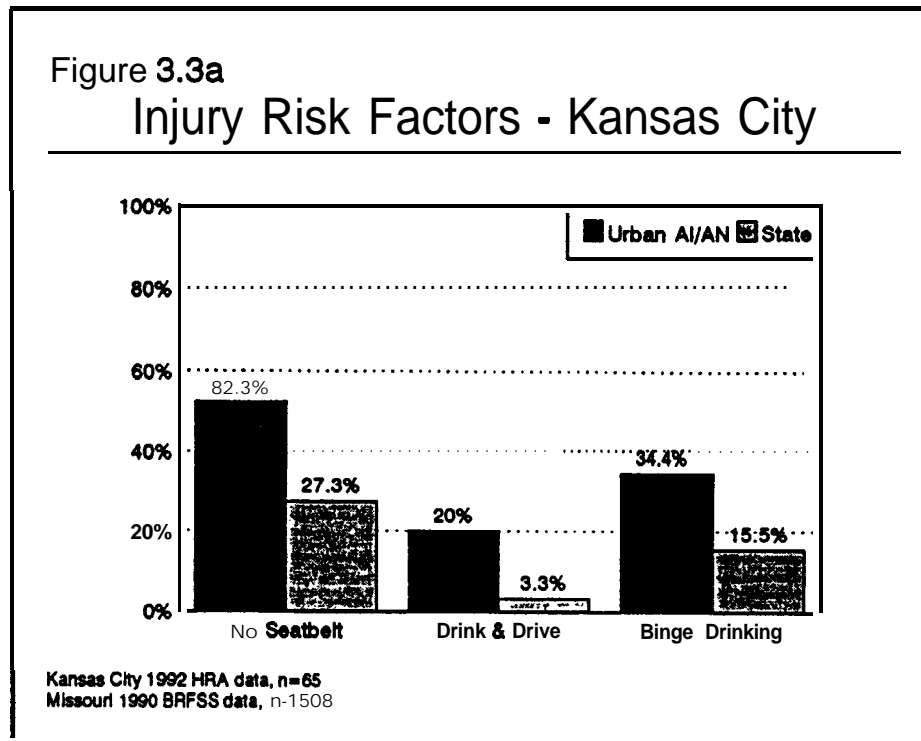
Smoking, obesity, and lack of exercise are all risk factors that contribute to the development of heart disease. All three risk factors are more prevalent among Kansas City assessment participants than among the Missouri state population as a whole. Heart disease is the leading cause of death among Kansas City American Indians/Alaska Natives, and modification of these high risk behaviors would help decrease death from heart disease.

In addition, 35 percent of Kansas City participants have a high blood pressure reading, 21.5 percent have a blood cholesterol of ≥ 240 mg/dL (high), and 25 percent have a blood cholesterol of 200-239 mg/dL (borderline high). For comparative purposes, the Year 2000 National Objectives for Health Promotion and Disease Prevention

recommends that no more than 20 percent of all adults have blood cholesterol levels of 240 mg/dL or greater.

Injury Risk Factors

Figure 3.3a reflects the proportion of Kansas City assessment participants with selected injury risk factors compared to those of the Missouri state general population.



As shown in Figure 3.3a, Kansas City assessment participants are two times more likely to not use seatbelts, six times more likely to drink and drive, and over twice as likely to binge drink as the Missouri state general population.

An additional risk factor for injury or death due to a motor vehicle accident is driving over the speed limit. Twenty-two percent of Kansas City participants typically drive six miles per hour or more over the speed limit.

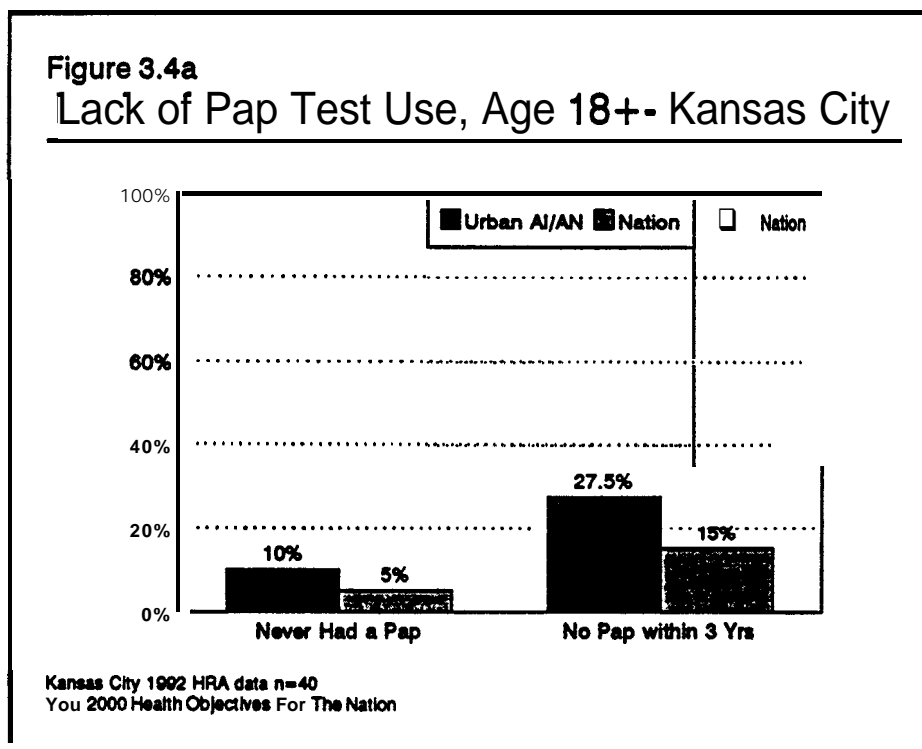
Diabetes

The prevalence of diabetes among American Indians/Alaska Natives varies from one Tribe to another, and from one region to another. Twenty-three percent of Kansas City assessment participants report they are diabetic. This compares to a national average of five percent in the general population.

In addition, sixty-five percent of Kansas City assessment participants have a family history of diabetes, and thirty-two percent have an elevated blood glucose (compared to an estimated prevalence in the U.S. total population of 6.6 percent). **Of all six study sites, the prevalence of diabetes and its associated risk factors among participants presented here is highest in Kansas City.**

Women's Health

Figure 3.4a reflects the lack of Pap test use among Kansas City women assessment participants age 18 and over.



Of the 65 Kansas City participants, 40 (62 percent) are women age 18 and over. Of these women, ten percent have never had a Pap test, and 27.5 percent have not had one within the last three years. The Year 2000 National Health Objectives include recommendations that at least 95 percent of all women age 18 and over have had a Pap

test at least once, and that 85 percent have had a Pap test within the most recent three years (leaving an unscreened percentage of five percent and 15 percent, respectively). Kansas City women participants are far from meeting these objectives.

The American Cancer Society recommends that women age 40 and older receive mammograms to screen for breast cancer every one to two years, with yearly mammograms beginning at age 50. Among Kansas City participants, 17 (26 percent) are women age 40 and older. Of these, 18 percent have never received a mammogram, and 29 percent have had a mammogram, but not within the past three years.

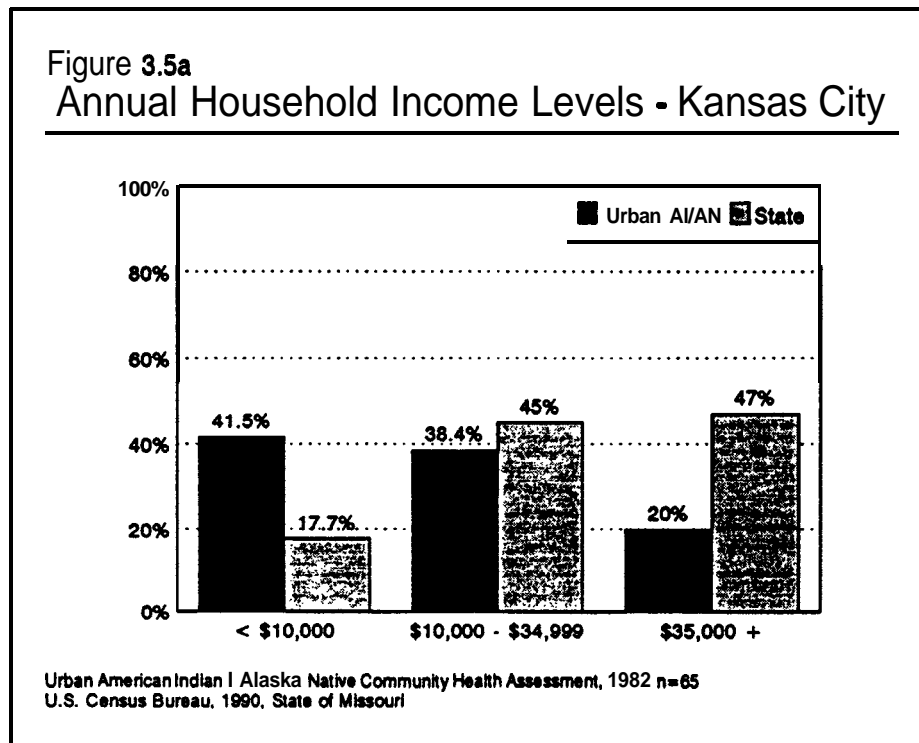
Men's Health

The American Cancer Society recommends yearly rectal exams for men age 40 and over as a screening for prostate cancer. Of Kansas City participants, fourteen (22 percent) are men age 40 and older. Of these, 21 percent have had a rectal exam within the past year, 29 percent have had a rectal exam but not within the past three years, and 14 percent have never had a rectal exam.

Community Health Assessment

Income

Figure 3.5a reflects income levels for Kansas City assessment participants compared to the Missouri state general population. Local income levels (county, MSA) were unavailable from Missouri's U.S. Census Bureau at the time of this report writing.

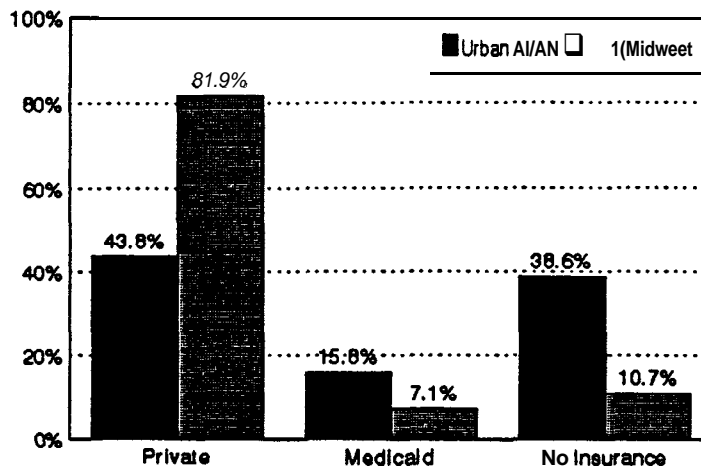


Kansas City assessment participants are almost two and a half times more likely than the Missouri general population to earn less than \$10,000 a year. In addition, participants in Kansas City are two and a half times less likely than the Missouri general population to earn annual incomes of \$35,000 or more. The median household income for Kansas City participants was \$13,437, while the median household income for the general population in Missouri was \$26,362.

Health Insurance Coverage

Figure 3.6a reflects health insurance coverage among Kansas City assessment participants under age 65.

Figure 3.6a
Insurance Coverage, Age < 65 - Kansas City



Urban American Indian / Alaska Native Community Health Assessment, 1992 n=57
 NCHS. National Health Interview Survey, 1999

Comparative data from the National Health Interview Survey are grouped according to region--Northeast, Midwest, South, and West. Missouri is in the Midwestern region.

Kansas City assessment participants are almost four times less likely than the Midwest general population to have health insurance. Kansas City participants are twice as likely to be covered by Medicaid, and about half as likely to have private health insurance coverage.

Eight (12 percent) of all Kansas City participants are age 65 or older. Of these, all have health insurance-Medicare, Medicaid, or a combination of the **two**.

Types of Health Facilities Used

Kansas City assessment participants **most** often seek health care at the following types of health facilities: private physician (36.9 percent); Indian Health Service clinic at Haskell Institute in Lawrence, Kansas (**26.2** percent); and Truman Medical Center outpatient clinics (10.8 percent).

Leading Problems When Seeking Health Care

The five leading problems experienced by Kansas City participants when seeking health care include: **cost** (55.4 percent); lack of health insurance (23.1 percent); lack of health care providers **who understand the health needs of American Indians/Alaska Natives**

(23.1 percent); distance to doctor (21.5 percent); and lack of transportation (15.4 percent).

SUMMARY OF KANSAS CITY FINDINGS

Health Status

Heart disease and cancer are the leading causes of death among Kansas City American Indians/Alaska Natives, followed by accidents, chronic liver disease and cirrhosis, and homicide. Fewer Kansas City American Indian/Alaska Native women receive prenatal care in the first trimester compared to the Kansas City general population.

Cardiovascular Health

Selected cardiovascular risk factors are more prevalent among Kansas City assessment participants than among the general population. Smoking, obesity, and lack of exercise are all much more prevalent among Kansas City American Indian/Alaska Native participants than among the Missouri general population. High blood pressure and high cholesterol levels, however, are less prevalent among Kansas City participants than among those in the U.S. general population.

Injury Prevention

Accidents tie for third among the five leading causes of death for Kansas City American Indians/Alaska Natives. Selected injury risk factors are higher among Kansas City assessment participants than among the Missouri general population. Lack of **seatbelt** use, drinking and driving, and binge drinking are all higher among participants than among the Missouri general population. Lack of **seatbelt** use is twice that of the Missouri population, drinking and driving is six times greater, and binge drinking is over twice that of the Missouri state population.

Diabetes Prevalence and Risk Factors

Twenty-three percent of Kansas City assessment participants report they are diabetic, which is over four times that found in the U.S. general population (5 percent). Elevated random glucose levels (≥ 115 mg/dL) were found among 32 percent of Kansas City participants, almost five times the estimated 6.6 percent found in the U.S. general population. And, 65 percent of all Kansas City assessment report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants in Kansas City do not meet the Year 2000 National Health Promotion and Disease Prevention Objective for having ever had a Pap test (90 percent screened versus a recommended screening level of 95 percent), or for receiving a Pap test within the past three years (72.5 percent screened versus a recommended screening level of 85 percent).

Kansas City women participants age 40 and over meet the Year 2000 National Health Objectives for mammogram screening, with 82 percent having had a mammogram at least once, compared to the recommended screening level of 80 percent.

Men's Health

Men Kansas City assessment participants fall short of meeting American Cancer Society recommendations for yearly rectal exams for prostate cancer screening. Only 21 percent of Kansas City men participants age 40 and over report having had a rectal exam within the past year.

Barriers to Care

Income

Kansas City assessment participants are 2 $\frac{1}{2}$ times more likely than the Missouri general population to earn annual household incomes of less than \$10,000. Median household income among Kansas City participants was \$13,437, compared to the median household income for the general Missouri population of \$26,362.

Health Insurance Coverage

Assessment participants are almost four times more likely than the Midwest general population to lack health insurance.

Health Care Utilization

The Kansas City Health Department and a local community health center document few clinic users who are American Indian/Alaska Native. The most commonly mentioned source of health care among Kansas City assessment participants is a private physician, followed by an Indian Health Service Clinic (Haskell Institute, 45 miles away), and the city's regional medical center outpatient clinics.

B. WASHINGTON, D.C.

History and Background

The Conoy (or Piscataway) Tribe were the first inhabitants of the lands between the Potomac River, near the present day location of Washington, D.C., and the Chesapeake Bay (Terrell, 1971).

Many of today's American Indian/Alaska Native residents of the area are persons, or relatives of those who were recruited for jobs during the 1930's and 1950's by the Bureau of Indian Affairs (BIA), the Indian Health Service (IHS), and the U.S. State Department (Bush, 1991). Many of those recruited came from boarding schools, primarily from the Haskell institute in Lawrence, Kansas. The U.S. military also attracted a number of American Indians/Alaska Natives to the Washington, D.C. area. Like most urban areas, current American Indian/Alaska Native residents of the Washington, D.C. area represent Tribes from all over the country.

Census Data

Table 3.1 b reflects 1990 population figures for the Washington, D.C. urbanized area.

Table 3.1 b. American Indian/Alaska Native and General Population, Washinaton, D.C.. 1990.

Total Population	American Indian/Alaska Native Population	Percentage of AI/AN to Total Population
3,363,031	9,040*	0.27

Data from 1990 U.S. Census

*The City of Washington, DC, records 1,432 American Indians/Alaska Natives; the remainder are divided fairly evenly between the Virginia and Maryland suburbs.

Meetinas with American Indian/Alaska Native Community Leaders

Meetings were held in the Washington, D.C. area with American Indian/Alaska Native community leaders having backgrounds in business, politics, and government. These individuals include: **LaDonna** Harris, Director of Americans for Indian Opportunity; Michael Nephew, board member and past president of the American Indian Intertribal Cultural Organization (AIITCO); and **LaVonna** Weller (phone interview), Bureau of Indian Affairs employee and active community member. The following is a summary of their

responses to questions about the health needs of American Indians/Alaska Natives in their community:

1. Sources of health care for Washington, D.C. American Indians/Alaska Natives include:
 - a. private physicians (**for those with health insurance**);
 - b. **health department clinics**; and
 - c. home reservation IHS or Tribal clinics.
2. Major barriers to health care experienced by American Indians/Alaska Natives in Washington, D.C. are:
 - a. cost;
 - b. lack of health insurance (“non-profits can’t afford health insurance because of high deductibles”)
 - c. high premiums and deductibles; and
 - d. not knowing where to go for needed care.
3. Potential solutions to these barriers are:
 - a. improved health insurance coverage; and
 - b. start an IHS clinic to provide general health care **services**, especially Maternal Child Health Services.
4. Types of health care services needed for American Indian/Alaska Native residents in Washington, D.C. include:
 - a. dental;
 - b. preventive health services for women and children;
 - c. women’s health care;
 - d. optometry;
 - e. pharmacy;
 - f. management of chronic illnesses (“then, people would not have to travel to their home reservations for health care”); and
 - g. generalized acute medical care.
5. Particular neighborhoods in Washington, D.C. with large numbers of American Indian/Alaska Native residents include:

Rockville, Maryland (IHS employees); and Falls Church, Virginia (**BIA** employees). (This information is anecdotal only, without supportive census tract population figures.)

Meetings with Health Department Officials

None of the Northern Virginia or Maryland health departments maintains service utilization data for American Indians/Alaska Natives. The city of Washington, DC, provides health services to its residents through the city's Ambulatory Health Care Administration. A meeting was held with Peter Coppola, Deputy Administrator for this agency on March 6, 1992. Mr. Coppola stated that race is requested on clinic registration forms when clients register for services; however, these data are not typically compiled and analyzed. On request, Mr. Coppola was able to obtain the following information: Out of a total of **55,000** registrations at the city's ambulatory health clinics for the preceding 12 month period, 152 registrants identified themselves as American Indian/Alaska Native.

Mortality Data

Using data supplied by the National Center for Health Statistics, an analysis of causes of death among American Indians/Alaska Natives in Washington, D.C. was completed by the American Indian Health Care Association for years 1985-1987. Table 3.2b reflects the causes of death for Washington, DC. American Indians/Alaska Natives for the three year period. While providing information on the leading causes of death among Washington, D.C. American Indians/Alaska Natives, the mortality rates themselves are unstable because of the few numbers of deaths reported (**n=5**).

Table 3.2b American Indian/Alaska Native Mortality Rates, Washington, D.C., 1985-1987.

Cause of Death	Mortality Rate (Per 100.000 Persons)
Malignant Neoplasms	4.19
Cerebrovascular Disease	4.19
Other Causes	12.57
ALL CAUSES (n=5)	20.95

Data from NCHS, 1985-1987, analyzed by American Indian Health Care Association, 1992. Mortality rates are crude rates, and not adjusted according to age.

The leading causes of death among American Indians/Alaska Natives living in Washington, D.C. are cancer and cerebrovascular disease (stroke).

Health Indicator Data

According to Washington, D.C.'s Department of Human Services, Office of Research and Statistics, health indicator data are not available for American Indians/Alaska Natives. Data are extracted for White, Black, Hispanic, and Other only. A special computer run is required to extract health indicator data for American Indians/Alaska Natives, not a viable option because of current budget problems and staff layoffs (Glendinning, 1992).

For simplicity in comparison, data were collected on selected health indicators for American Indians/Alaska Natives living in the Northern Virginia suburbs (representing 44 percent of the Washington, D.C. area American Indian/Alaska Native population), and compared to the general population for Northern Virginia and the state of Virginia as a whole. The Commonwealth of Virginia, Center of Health Statistics, normally does not extract these data. However, on request and for a charge, certain information was provided. Table **3.3b** reflects this information.

In an attempt to improve the accuracy of rates and percentages for the selected indicators, three years of data were compiled for Northern Virginia American Indian/Alaska Native residents. All Races data for Northern Virginia and the state as a whole are reported for a single year--1990.

Table 3.3b. Selected Health Indicator Data. Northern Virginia^a American Indian/Alaska Native, Northern Virginia All Races, Virginia State All Races.

Health Indicator	American Indian/Alaska Native Data for 3 years*	All Races, Data for 1990	
	Northern Virginia	Northern Virginia	VA State
Birth Rate (live births over 1000 population), per year	8.8	16.6	16.0
% Births to women who received prenatal care in 1st trimester	68.6	N.A.	79.5
% low birth weight infants (≤ 2500 Grams)	13.7	N.A.	7.3
infant mortality rate (infant deaths per 1000 live births), per year	29.4 (n=1)	6.7	10.2

Data obtained from Commonwealth of Virginia, Center for Health Statistics

*Data for 3 year period 1988-1990

With only one American Indian/Alaska Native infant death reported in the three year period, the infant mortality rate presented above is highly unstable. However, the single number reported is another indication of the likelihood of under reporting of American Indian/Alaska Native **mortality statistics**.

The birth rate of American Indians/Alaska Natives in Northern Virginia is half the rate for the state general population. The percentage of American Indian/Alaska Native women who receive prenatal care in the first trimester is less than the Virginia state general population (68.6 percent versus 79.5 percent), while the percentage of low birth weight infants for Northern Virginia American Indians/Alaska Natives is almost twice that of the Virginia state population.

Health Risk Appraisals

Several American Indian/Alaska Native organizations were instrumental in implementing this project in the Washington, D.C. area, including: Indian Health Service; Americans for Indian Opportunity; American Indian InterTribal Cultural Organization (AIITCO); and the American Indian. Society of Washington, D.C.

Health Risk Appraisals and Community Health Assessments were conducted in the **Washington, D.C.** area in March, **1992 at the** following locations:

- **Indian Health Service (March 3)**
- AllITCO organizational meeting (March 5); and
- University of Maryland's Second Annual Powwow, co-sponsored by the Native American Student Union and AllITCO (March 7 & 8).

Health Risk Appraisal data are presented on selected health risk behaviors for which comparative data are available. In the area of cardiovascular health, information is presented on smoking, sedentary lifestyle, and obesity. In the area of safety, data are presented on lack of ~~seatbelt~~ use, drinking and driving, and binge drinking. The **1990** Washington, D.C. Behavioral Risk Factor Surveillance System (BRFSS) provides comparative data. Information is also presented on women's health, men's health, diabetes, income, health insurance coverage, and access to health care issues. National comparative data are presented for these areas from the National Center for Health Statistics and the Year 2000 Health Promotion and Disease Prevention Objectives for the Nation.

Participant Characteristics

Figure 3.1 b reflects selected demographic characteristics of persons participating in Health Risk Appraisals and Community Health Assessments in Washington, DC..

Figure **3.1b** - Demographics of Washington, D.C.
Assessment participants

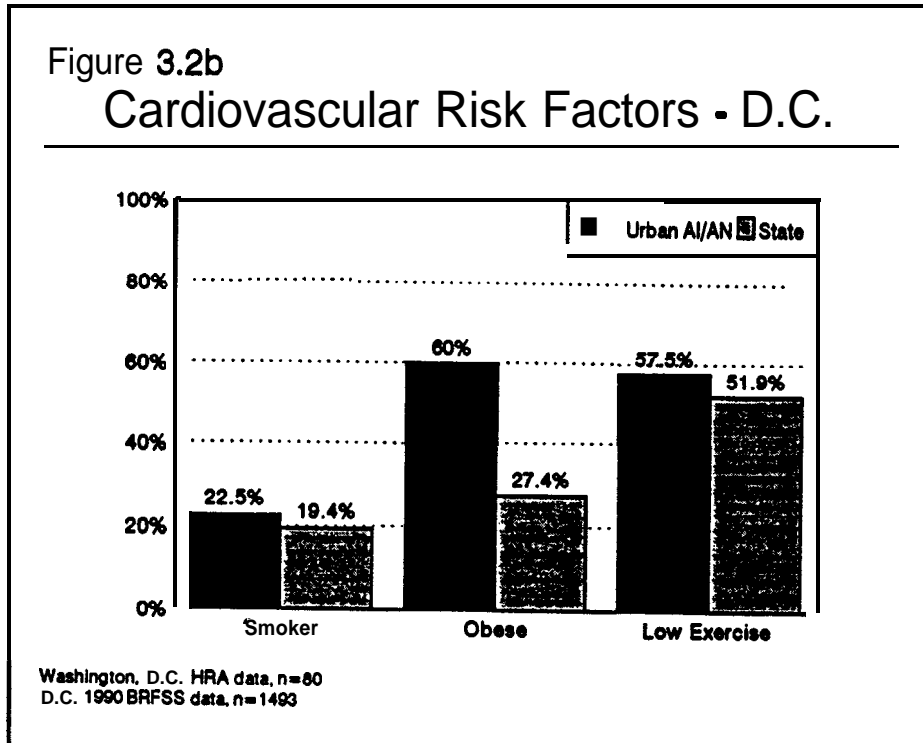
*	Age	Median	30
		Range	18-65
*	Sex	Female	62.5%
		Male	37.5%
*	Employment	Unemployed	5.0%
		Employed	89.9%
		Student	2.5%
		Retired	1.3%
		Homemaker	3.8%
*	Education	Some High School	6.4%
		High School Grad	19.2%
		College Grad	10.3%
		Advanced Degree	25.6%
*	Ethnicity	Full-blood	41.3%
		< Full-blood	506%
*	Tribes	Cherokee	10.0%
	(26 Total)	Navajo	10.0%
		Sioux	10.0%
		Other	70.0%

Number of participants = 80

The median age of project participants is 38, and 62.5 percent of the participants are women. Ninety percent of participants are employed, 10 percent are college graduates, and six percent hold professional or advanced degrees. Forty-one percent are full blood American Indian/Alaska Native. The three Tribes most often represented-Cherokee, Navajo, and Sioux-comprise just 30 percent of the total American Indian/Alaska Native population, indicating the diversity of Tribes represented in the Washington, D.C. American Indian/Alaska Native community.

Cardiovascular Risk Factors

Figure 3.2b reflects the proportion of Washington, D.C. assessment participants with selected cardiovascular risk factors compared to those of the Washington, D.C. general population.

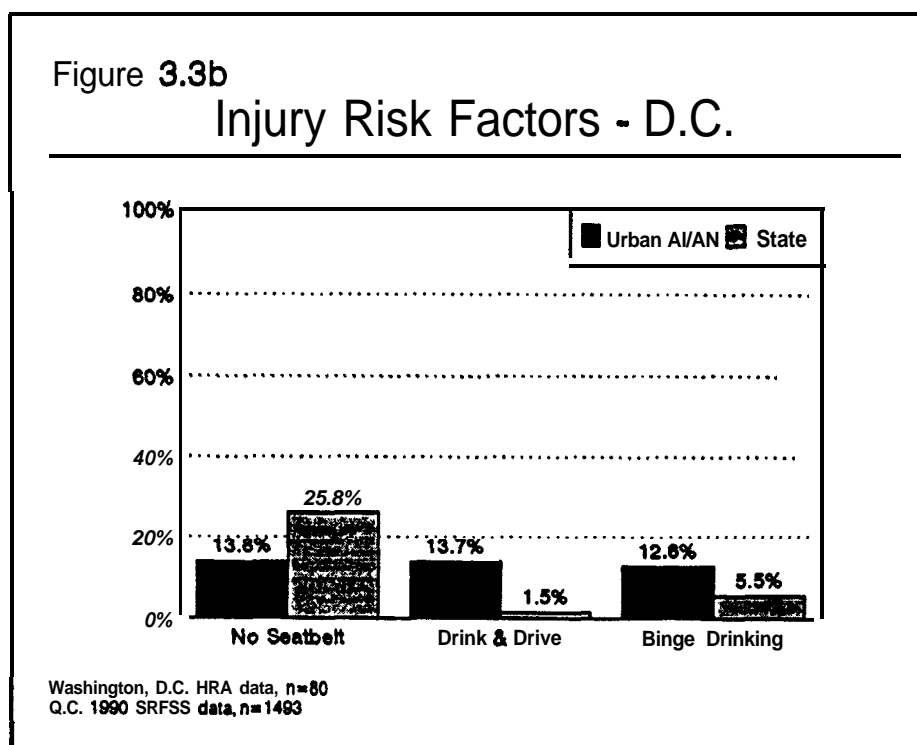


Smoking, obesity, and lack of exercise are all risk factors that contribute to the development of heart disease. All three factors are more prevalent among Washington, D.C. assessment participants than among the Washington, D.C. population as a whole. Smoking and lack of exercise are slightly more prevalent among Washington, D.C. participants than among the general population, while obesity is over twice that of the general Washington, D.C. population.

In addition, 26 percent of Washington, DC. participants have a high blood pressure reading, fifteen percent have a blood cholesterol of ≥ 240 mg/dL (high), and 32.5 percent have a blood cholesterol of 200-239 mg/dL (borderline high). For comparative purposes, the Year 2000 National Objectives for Health Promotion and Disease Prevention recommends no more than 20 percent of all adults have blood cholesterol levels of 240 mg/dL or greater.

Injury Risk Factors

Figure 3.3b reflects the proportion of Washington, D.C. assessment participants with selected injury risk factors compared to those of the Washington, D.C. general population.



As shown in Figure 3.3b, Washington, D.C. assessment participants are half as likely to not use their seatbelts, but are nine times more likely to drink and drive, and over two times more likely to binge drink than the Washington, D.C. general population.

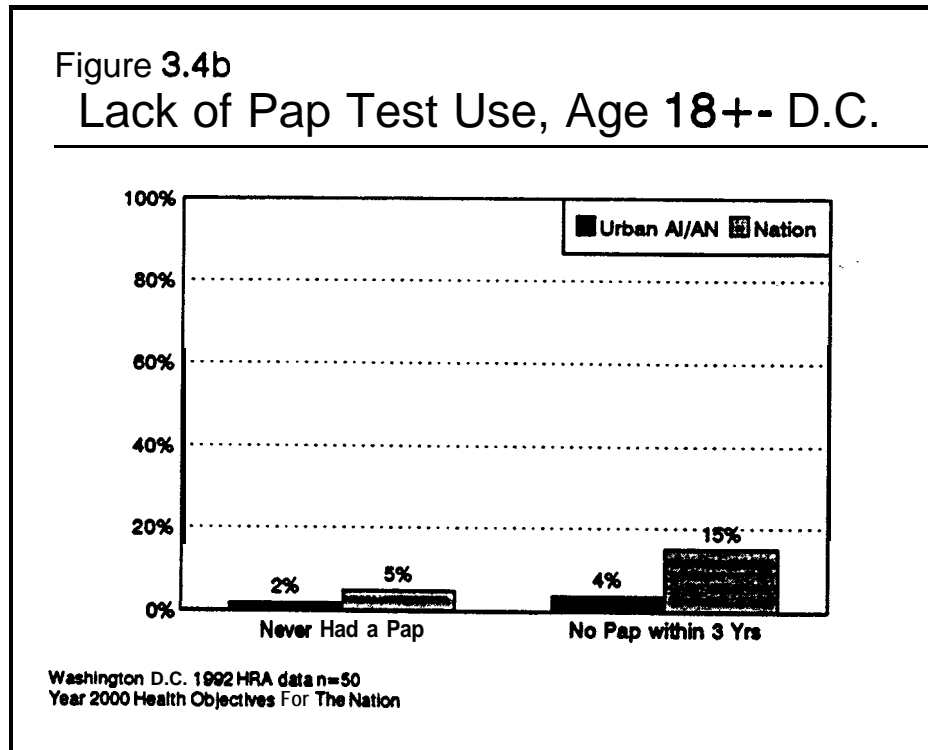
An additional risk factor for death or injury due to a motor vehicle accident is driving over the speed limit. Thirty-seven percent of Washington, D.C. participants typically drive six to ten miles per hour over the speed limit, while 18 percent drive at least 11 miles per hour over the speed limit.

Diabetes

Six percent of Washington, D.C. assessment participants report they are diabetic. This compares to a national average of five percent for the U.S. general population. **Forty-one** percent have a family history of diabetes, and 12.5 percent have an elevated blood glucose (compared to an estimated 6.6 percent for the total U.S. population).

Women's Health

Figure 3.4b reflects the lack of Pap test use among Washington, D.C. women assessment participants age 18 and over.



Of the 80 Washington, DC. participants, 50 (63 percent) are women age 18 and over. Of these women, two percent have never had a Pap test, and four percent have not had one within the last three years. Washington, D.C. women participants are **well** within the Year 2000 National Health Objectives for Pap test use of 95 percent for having ever had a Pap test, and 85 percent for having had a Pap test within the most recent three years.

The American Cancer Society recommends that women age 40 and older receive mammograms to screen for breast cancer every one to two years, with yearly mammograms beginning at age 50. Among Washington, D.C. participants, 22 (28 percent) are women age 40 and older. **Of** these, 18 percent have never received a mammogram, and five percent have had a mammogram, but not within the past three **years**.

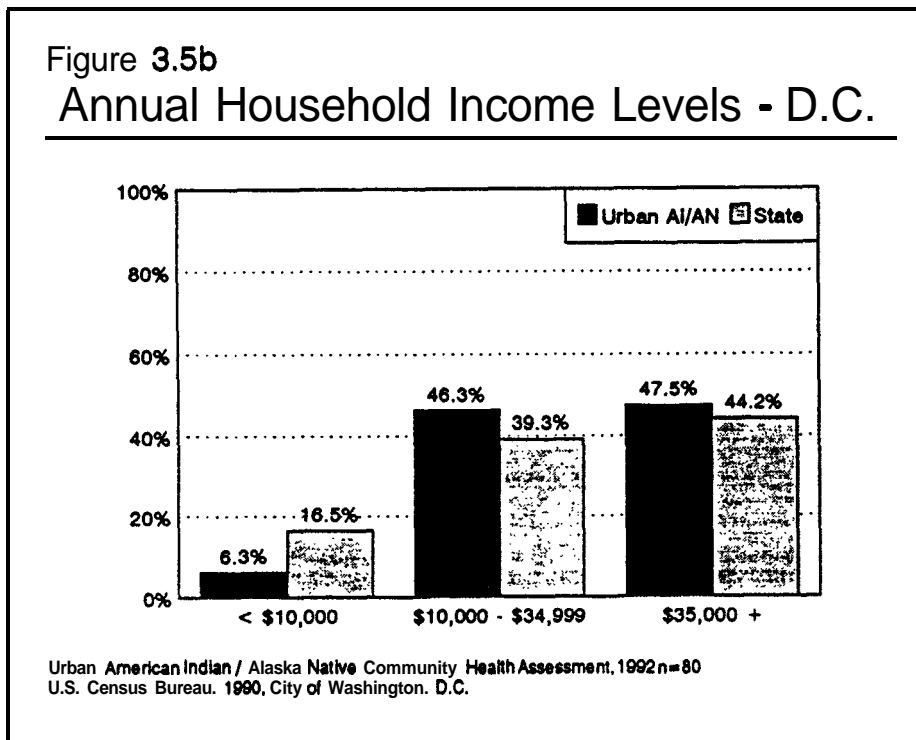
Men's Health

The American Cancer Society recommends yearly rectal exams for men age 40 and older as a screening for prostate cancer. Among Washington, D.C. participants, 15 (19 percent) are men age 40 and older. Of these, 27 percent have had a rectal exam within the past year, 40 percent have had an exam but not within the past three years, and seven percent have never had a rectal exam.

Community Health Assessment

Income

Figure 3.5b reflects income levels for Washington, D.C. assessment participants compared to the Washington, D.C. general population.

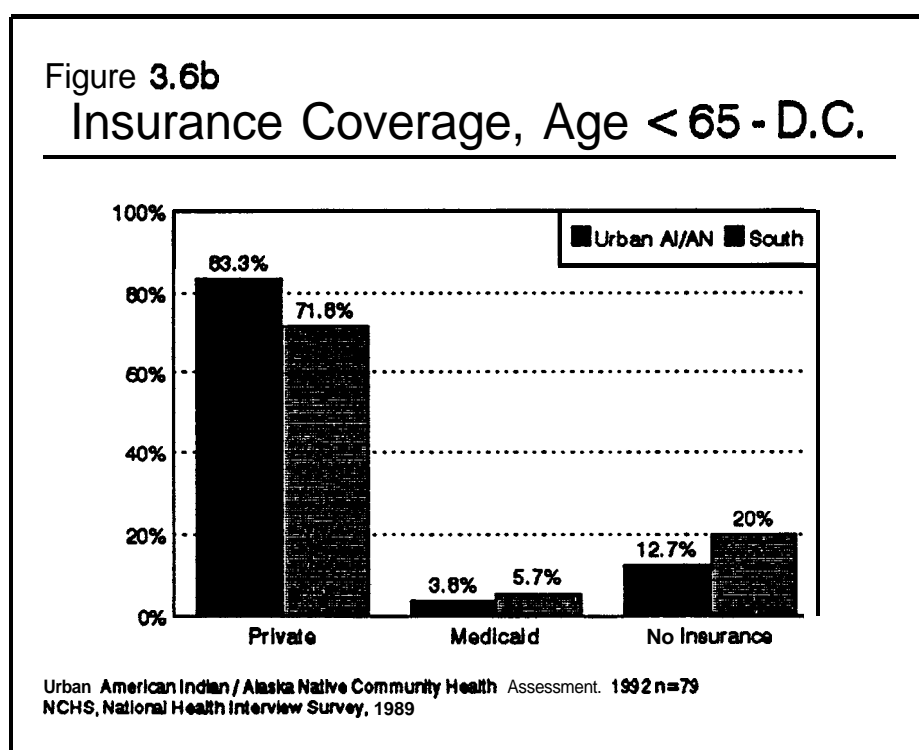


Washington, D.C. assessment participants are less than half as likely as the Washington, D.C. general population to have annual household incomes of less than \$10,000, and slightly more likely to earn in the mid-range of \$10,000-34,999 and upper range of \$35,000 or more. The median household income for Washington, DC. participants was \$33,393.

The city of Washington, D.C. reports the 1990 Census figure for median household income among American Indians/Alaska Natives in Washington, D.C. as \$24,612, while the median household income for the Washington, D.C. general population is \$30,727. Participants in the assessment earn considerably higher incomes than other American Indian/Alaska Native residents of Washington, D.C. One likely reason for this is the higher number of employed persons (90 percent) participating in the assessment.

Health Insurance Coverage

Figure 3.6b reflects insurance coverage among Washington, D.C. assessment participants under age 65.



Comparative data from the National Health Interview **Survey** are grouped according to region--Northeast, Midwest, South, and West. Washington, D.C. is in the Southern region.

Washington, D.C. assessment participants are more likely to have insurance coverage than the general population in the South. More are likely to have private health insurance, and fewer are likely to be covered by Medicaid. As with higher income, insurance coverage is related to employment status. And, 90 percent of all project participants are employed either full or part time. Only one participant in Washington, D.C. is age 65 or older, and that person is covered by private health insurance.

Types of Health Facilities Used

Washington, DC. assessment participants most often seek health care from private physicians (57.7 percent), and neighborhood or family health centers (10.3 percent).

Leading Problems When Seeking Health Care

The five leading problems experienced by Washington, DC. assessment participants when seeking health care include: cost (67.9 percent); no American Indian/Alaska Native health care providers (24.4 percent); not knowing what services are available (21.8 percent); lack of trust in mainstream providers (16.7 percent); and lack of health insurance (14.1 percent).

SUMMARY OF WASHINGTON, D.C. FINDINGS

Health Status

Stroke and cancer are the leading causes of death among Washington, D.C. American Indians/Alaska Natives. Fewer American Indian/Alaska Native women receive prenatal care in the first trimester, and the percentage of low birth weight babies is twice that for Northern Virginia American Indians/Alaska Natives than for the state's general population.

Cardiovascular Health

Selected cardiovascular risk factors are more prevalent among Washington, D.C. assessment participants than among the Washington, DC. general population. Smoking, obesity, and lack of exercise are all **more prevalent among Washington, D.C. participants than among the general population. High blood pressure and high cholesterol levels**, however, are less prevalent for participants in Washington, DC. than for the U.S. general population.

injury Prevention

Selected injury risk factors are greater among Washington, D.C. assessment participants than among the Washington, D.C. general population. Drinking and driving, and binge drinking are higher among participants than among the Washington, DC. general population. Drinking and driving is nine times higher among participants than among the general population. Lack of **seatbelt** use among assessment participants, however, is half that of the Washington, D.C. general population.

Diabetes Prevalence and Risk Factors

Six percent of Washington, D.C. assessment participants report they are diabetic, which closely compares to the U.S. general population figure of five percent. Elevated random glucose levels (≥ 115 mg/dL) were found among 12.5 percent of participants, twice that found in the U.S. general population (6.6 percent). And, 41 percent of all participants report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants in Washington, DC. easily meet **the Year 2000** National Health Objectives for having ever had a Pap test (98 percent screened versus the recommended screening level of 95 percent), and for receiving a Pap test within the past three years (96 percent screened versus the **recommended** 85 percent).

Washington, DC. women assessment participants age 40 and over **meet** the Year 2000 National Health objective for mammogram screening, with 82 percent having **ever** had a screening mammogram, compared to the recommended screening level of 80 percent.

Men's Health

Washington, D.C. men assessment participants age 40 and over fall short of meeting American Cancer Society **recommendations** for yearly rectal exams for prostate cancer screening. Only 27 percent of Washington, DC. men participants report having received a rectal exam within the past year.

Barriers to Care

Income

Washington, D.C. assessment participants are less than half as likely as the Washington, D.C. general population to earn **annual household incomes of less than \$10,000**. **Median household income among participants was \$33,393, compared to the median household income for the general Washington, D.C. population of \$30,727**. The higher incomes for Washington, DC. participants are likely **due to the high employment level of assessment participants (90 percent)**, a result of conducting **HRAs** and Community Health Assessments at places of employment (IHS). However, it's also important to note that despite the high income levels of participants, the prevalence of a number of the behavioral risk factors is still high.

Health Insurance Coverage

Washington, D.C. assessment participants are more likely than the general population in the South to have health insurance.

Health Care Utilization

Washington, DC. ambulatory care clinics document few clinic users who are American Indian/Alaska Native. Health departments in Maryland and Northern Virginia do not classify service utilization data for American Indian/Alaska Native service users. The most commonly mentioned source of health care among Washington, DC. project participants is a private physician, distantly followed by a neighborhood or family health center. A number of participants with health insurance, especially those employed by the federal government, report having to pay such high deductibles that they are discouraged from seeking health care when needed. Several Washington, D.C. participants report traveling back to their home reservations for health care services.

C. HOUSTON, TEXAS

History and Background

The Caddoan peoples made their homes in the lands now identified as eastern Texas. They clustered in small villages along rivers, and in the **1500s**, occupied parts of East Texas and Louisiana, where they lived in more than 20 towns joined within three confederacies, the Hasinai, Caddos, and Natchitoches (Lowry, 1992.) The Wichita Tribe lived west of the Caddos, while the area near San Antonio was the land of the Coahuiltecan.

By the late **1700s** and early **1800s**, many eastern American Indian Tribes-the Alabama, Cherokee, Choctaw, Coushatta, Delaware, Kickapoo, and Shawnee-had been pushed out of their homelands into Texas. In 1836, Texas leader Sam Houston signed a treaty granting the Cherokee title to land in northeast Texas, but the First Congress rejected the treaty the following year. Houston's successor, Mirabeau Lamar, developed policies of displacement and extermination toward the Native people of Texas, and carried out these policies with a vengeance. Wars erupted, and many people were killed. An alternative to fighting was to become "missionized" by the Catholic priests; those who chose this option usually took Spanish last names.

When Texas became a state in 1845, it retained rights to its public land, which meant that the federal government had no land to give to American Indians living in Texas. By the end of the **1800s**, Lamar's goal of extermination had almost been achieved. Those who had not been killed or had died from disease were moved to Oklahoma Territory. Those who had adopted Catholicism often identified more with Mexican than with American Indian/Alaska Native culture (Vasquez y Sanchez, 1992). Today, there are three remaining American Indian communities within the state boundaries of Texas, on reservations recognized by the federal government: the Kickapoo Traditional Tribe of Texas in Eagle Pass; the Alabama-Coushatta Tribe of Texas in Livingston; and the Ysleta del Sur Pueblo on the Tigua Indian Reservation in El Paso.

Census Data

Table 3.1 c reflects 1990 population figures for the Houston urbanized area.

Table 3.1c. American Indian/Alaska Native and General Population. Houston, 1990.

Total Population	American Indian/Alaska Native Population	Percentage AI/AN to Total Population
2,901,851	8,141	0.28

Data from 1990 U.S. Census

Meetinas with American Indian/Alaska Native Community Leaders

Meetings were held in Houston with American Indian/Alaska Native community leaders having backgrounds in business, vocational rehabilitation, and health care. These include: Preston Thompson, member of the Intertribal Council of Houston; and Richard Yahola, counselor with the Texas Rehabilitation Commission, also a member of the Intertribal Council of Houston. The following is a summary of their responses to questions about the **health** needs of American Indians/Alaska Natives in their community:

1. Sources of health care for American Indians/Alaska Natives in Houston are:
 - a. city health department; and
 - b. private physician.
2. Major barriers to health care for American Indians/Alaska Natives in Houston are:
 - a. cost;
 - b. not knowing what **services** are available in Houston;
 - c. lack of transportation (no decent public transportation system);
 - d. cultural insensitivity among mainstream providers;
 - e. too far to an IHS facility;
 - f. dealing with the bureaucracy of health care.
3. **Potential** solutions to these barriers include:
 - a. provide adequate information and referral services to American Indians/Alaska Natives; and

- b. establish some type of clinic specifically for American Indians/Alaska Natives.
4. Types of health services needed in Houston for American Indian/Alaska Native residents are:
- a. dental;
 - b. preventive health services;
 - c. prenatal and obstetrics;
 - d. optometry;
 - e. pharmacy;
 - f. health education;
 - g. mental health; and
 - h. generalized acute medical care.
5. Particular neighborhoods in Houston with significant numbers of American Indian/Alaska Native residents are:

While the population of American Indians/Alaska Natives is fairly well dispersed throughout the city of Houston, Pasadena and the Heights are two neighborhoods with large numbers of American Indian/Alaska Native residents. (This information is anecdotal only, without supportive census tract population figures.)

Meetings with Health Department Officials

A meeting was held March 25, 1992 with James Arthur, Division Manager of Personal Health Services for the city of Houston's Department of Health and Human Services. Houston provides ambulatory health care to its residents through a system of eight clinics located throughout the city. Service utilization data are maintained for the following racial categories: White; Black; Asian; Hispanic; and Other. Information for American Indians/Alaska Natives is maintained for Maternal Child Health Services only. These figures are reflected in Table 3.2c.

Table 3.2c. American Indian/Alaska Native Users and Encounters. City of Houston Department of Health and Human Services. Personal Health Services Division, 1991.

Program	Total Number of Users 1/91-12/91	Total Number of Encounters 1/91-12/91
Family Planning	38	59
Maternity	71	292
Well Child	70	165
Total	187	516
Percent of Total	0.4%	0.4%

Data from City of Houston Department of Health and Human Services

Visits made by American Indian/Alaska Native residents of Houston comprise 0.4 percent of the total visits made to the City of Houston's Maternal Child Health Services. Houston's American Indian/Alaska Native population comprises just under 0.3 percent of the total number of residents. This indicates that Houston's American Indian/Alaska Native residents use the city's Maternal Child Services in close proportion to their overall number.

Mortality Data

Using data supplied by the National Center for Health Statistics, an analysis of causes of death among American Indians/Alaska Natives in Houston was completed by the American Indian Health Care Association for years **1985-1987**. Table **3.3c** reflects the causes of death for Houston American Indians/Alaska Natives for the three years. While providing information on the leading causes of death among Houston American Indians/Alaska Natives, the mortality rates themselves are unstable because of the few numbers of reported deaths (**n=11**).

Table 3.3c American Indian/Alaska Native Mortality Rates, Houston, Texas, 1985-1997.

Cause of Death	Mortality Rate (Per 100,000 Persons)
Diseases of the Heart	14.08
Malignant Neoplasms	10.56
Accidents	3.52
Cerebrovascular Disease	3.52
Other Causes	7.04
ALL CAUSES (n=1 1)	38.72

Data from NCHS, 1985-1987, analyzed by American Indian Health Care Association, 1992. Mortality rates are crude rates, and not adjusted according to age.

Heart disease is the leading cause of death among Houston area American Indians/Alaska Natives, followed by cancer, accidents, and cerebrovascular disease (stroke).

Health Indicator Data

Health indicator data are available for Houston American Indians/Alaska Natives from the Texas Department of Health for a two year period only, **1989-90**. Table **3.4c** provides information on selected health indicators for the Houston American Indian/Alaska Native population compared to the Houston and Texas state general population.

Table 3.4c. Selected Health Indicator Data. Houston American Indian/Alaska Native. Texas American Indian/Alaska Native. Houston All Races. Texas All Races.

Health Indicator	American Indian/Alaska Native, Data for 2 years		All Races, Data for 1990	
	Houston	TX State	Houston	TX State
Birth Rate (live births per 1000 population), per year	7.8*	N.A.	24.5	18.6
% Births to women who received prenatal care in 1st trimester	68.8*	N.A.	66.1	68.4
% low birth weight infants (≤ 2500 Grams)	6.3*	N.A.	8.1	7.0
infant mortality rate (infant deaths per 1000 live births), per year	0+	0+	9.3	8

Data obtained from Texas Department of Health, Bureau of State Health Data and Policy Analysis

*Data for 2 year period 1989-1 990

+No reported American Indian/Alaska Native infant deaths in Texas for 3 year period, 1988-1 990

The Houston American Indian/Alaska Native birth rate is less than one-third that of the Houston **general population**, and about half that of the general population of Texas state. Slightly more Houston American Indian/Alaska Native women than women in the Houston general population receive early prenatal care, and fewer babies with a low birth weight were born to American Indian/Alaska Native mothers than to women in the Houston or Texas state general population.

No infant deaths were recorded in the state of Texas for American Indians/Alaska Natives for the three year period, 1988-1 990. The US. Census Bureau reports a **1990** statewide American Indian/Alaska Native population of 65,877. The lack of any reported infant deaths for years 1988-1 990 lends credence to the argument that American Indian/Alaska Native mortality and morbidity statistics are often miscoded in other racial categories.

Health Risk Appraisals

The Texas Department of Vocational Rehabilitation's American Indian/Alaska Native liaison counselor, and representatives of the Intertribal Council of Houston were actively involved in the Health Risk Appraisal component of this study in the Houston area. With the assistance of these groups, Health Risk Appraisals were conducted at the following sites in **March, 1992**:

- Texas Rehabilitation Commission's Houston South Field Office (March 24 & 25);
- Alabama-Coushatta Indian Tribal Council Employment and Training Program, Houston office (March 26 & 27); and
- March Powwow, sponsored by the Intertribal Council of Houston (March 28).

Health Risk Appraisal data are presented on selected health risk behaviors for which comparative data are available. In the area of cardiovascular health, information is presented on smoking, sedentary lifestyle, and obesity. In the area of safety, data are presented on lack of **seatbelt** use, drinking and driving, and binge drinking. The 1990 Texas Behavioral Risk Factor Surveillance System (BRFSS) provides comparative statewide data.

Additional information is presented on women's health, men's health, diabetes, income, health insurance coverage, and access to health care issues. National comparative data are provided from the National Center for Health Statistics and the Year 2000 Health Promotion and Disease Prevention Objectives for the Nation.

Participant Characteristics

Figure 3.1 c reflects selected demographic characteristics of persons participating in the health assessment in the Houston area.

**Figure 3.1c - Demographics of Houston
Assessment participants**

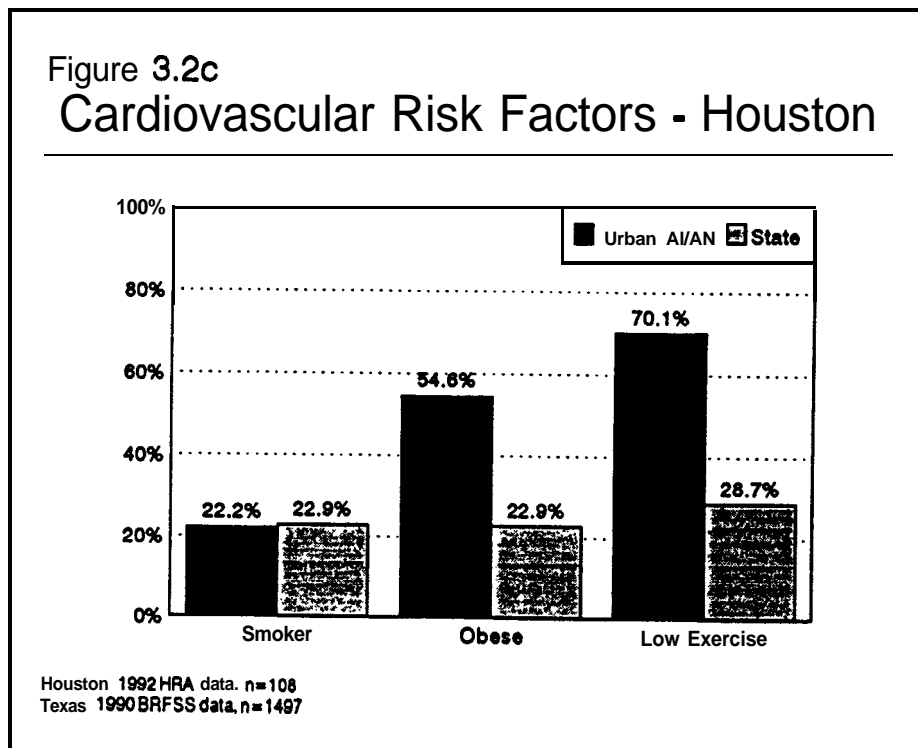
*	Age	Median Range	40 18-87
*	Sex	Female Male	61.1% 38.9%
*	Employment	Unemployed Employed Student Retired Homemaker	16.3% 64.4% 5.8% 6.7% 6.7%
*	Education	Some High School High School Grad College Grad	7.5% 17.0% 20.8%
*	Ethnicity	Full-blood < Full-blood	14.8% 85.2%
*	Tribes (26 Total)	Cherokee Choctaw Chippewa Other	27.0% 7.4% 6.5% 58.3%

Number of participants = 108

The median age of the 108 project participants is 40, and 61 percent are female. **Sixty-four** percent are employed either full or part time. Fifteen percent are full blood American Indian/Alaska Native. The three Tribes most often represented-Cherokee, Choctaw, and Chippewa-comprise 42 percent of the total Houston participants. While these three Tribes make up a large part of the Houston American Indian/Alaska Native community, an additional 23 Tribes are represented, reflecting the overall diversity of the Houston American Indian/Alaska Native community.

Cardiovascular Risk Factors

Figure 3.2c reflects the proportion of Houston assessment participants with selected cardiovascular risk factors compared to those of the Texas state general population.

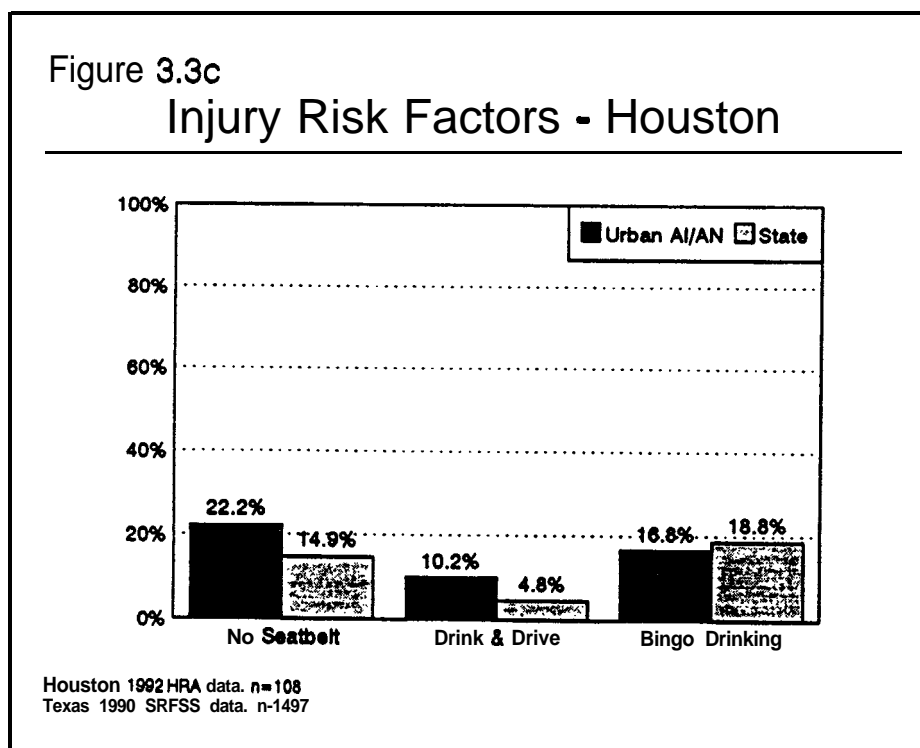


Smoking, obesity, and lack of exercise are all risk factors that contribute to the development of heart disease. Houston assessment participants are equally as likely as the Texas state general population to smoke, but over twice as likely to be obese and to exercise too little.

In addition, 29 percent of Houston participants have a high blood pressure reading, thirteen percent have a blood cholesterol of ≥ 240 mg/dL (high), and 29.5 percent have a cholesterol of 200-239 mg/dL (borderline high). For comparative purposes, the Year 2000 National Objectives for Health Promotion and Disease Prevention recommends no more than 20 percent of all adults have blood cholesterol levels of 240 mg/dL or greater.

Injury Risk Factors

Figure 3.3c reflects the proportion of Houston assessment participants with selected injury risk factors compared to the Texas general population.



As shown in Figure 3.3c, Houston assessment participants use their seatbelts less often, are twice as likely to drink and drive, but are less likely to binge drink than the Texas state general population.

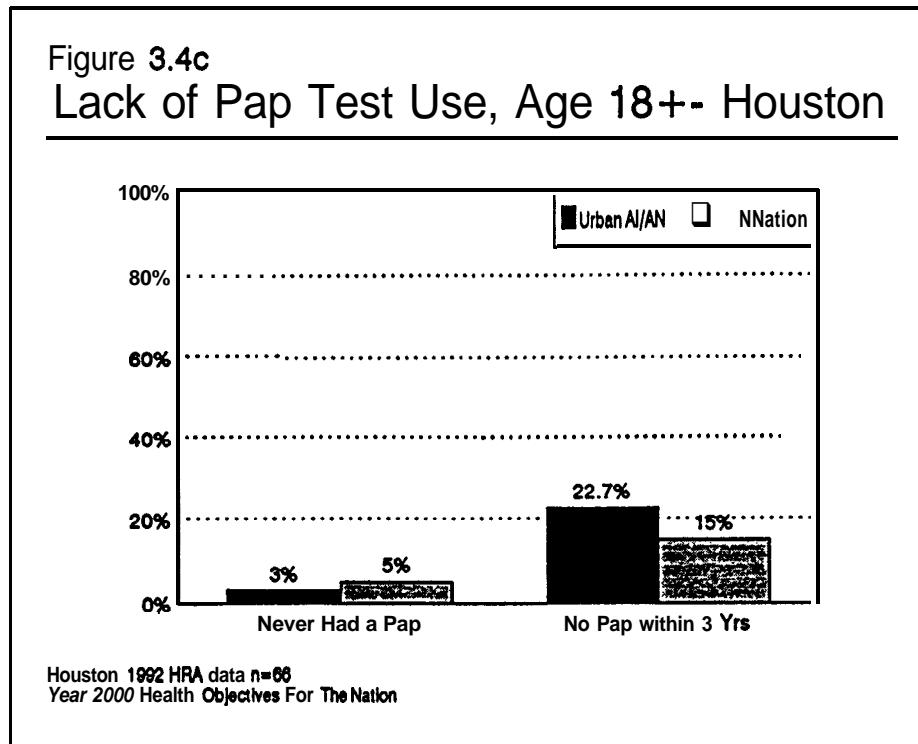
Another risk factor for death or injury due to a motor vehicle accident is driving over the speed limit. ~~Thirty-two~~ percent of Houston participants drive 6-10 miles per hour over the speed limit, while 12 percent drive at least 11 miles per hour over the speed limit.

Diabetes

Three percent of Houston assessment participants report they are diabetic, compared to a national estimate of five percent among the general population. Forty percent have a family history of diabetes, and sixteen percent have an elevated blood glucose (compared to an estimate in the U.S. total population of 6.6 percent).

Women's Health

Figure 3.4c reflects the lack of regular Pap test use among Houston women assessment participants age 18 and over.



Of the 108 participants, 66 (61 percent) are women age 18 and over. Of these women, three percent have never had a Pap test, and twenty-three percent have had one, but not within the last three years. Houston women participants are well within the Year 2000 National Health Objectives for having had a Pap test at least once (95 percent recommended), but need to improve the regularity with which they obtain Pap tests to the desired level of 85 percent within the most recent three years.

The American Cancer Society recommends that women age 40 and older receive mammograms to screen for breast cancer every one to two years, and yearly beginning at age 50. Among Houston participants, 33 (31 percent) are women age 40 and older. Of these, 18 percent have never received a mammogram, and 24 percent have had one, but not within the past three years.

Men's Health

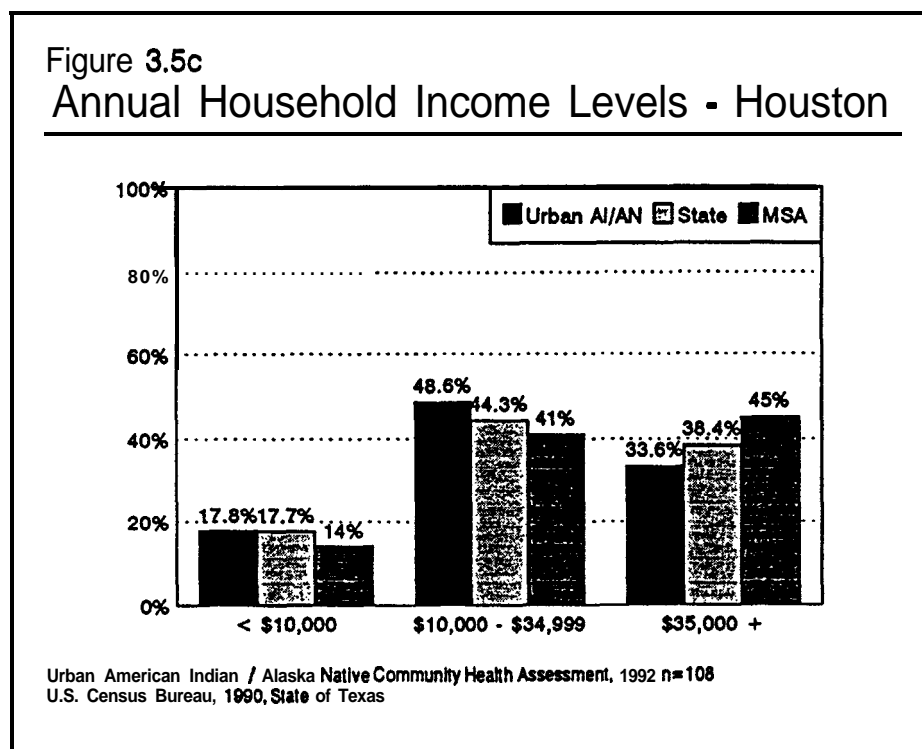
The American Cancer Society recommends yearly rectal exams for men age 40 and older as a screening for prostate cancer. Of Houston participants, 22 (20 percent) are

men age 40 and older. Of these, nine percent have had a rectal exam within the past year, 41 percent have had an exam but not within the past three years, and 18 percent have never had a rectal exam.

Community Health Assessment

Income

Figure 3.5c reflects household income levels for Houston assessment participants compared to the Texas and Houston MSA general population.

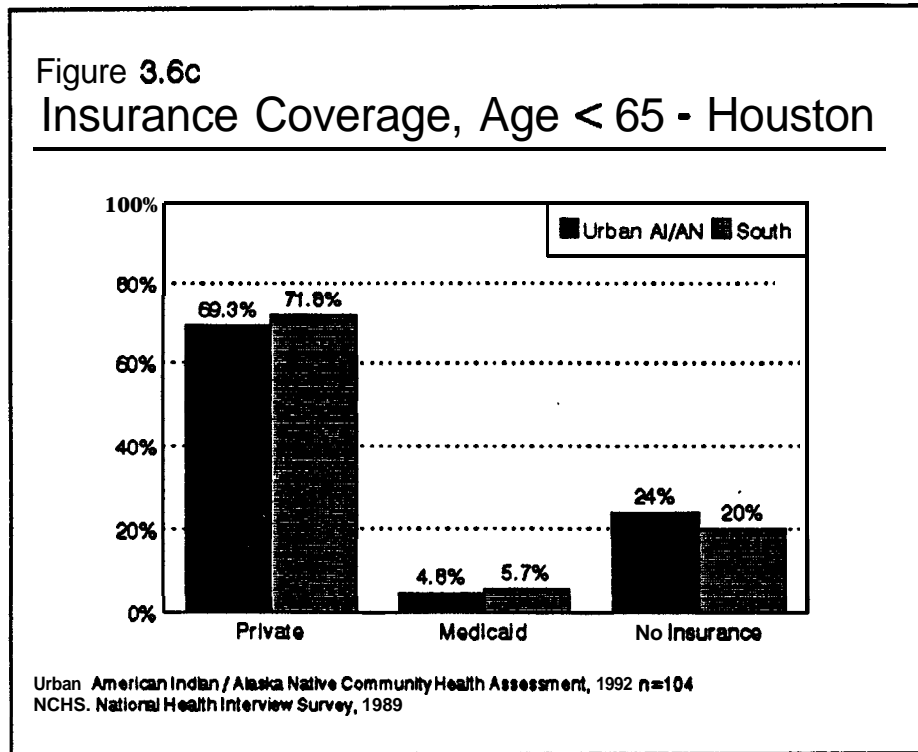


Houston assessment participants are about as likely as the state and MSA general population to earn less than \$10,000 a year, slightly more likely **to earn in the mid-range of \$10,000-\$34,999**, and less likely to earn \$35,000 or more.

The median household income for Houston participants was \$27,708. According to Texas state 1990 Census Bureau figures, median household income for the Houston MSA general population was \$31,473, while Texas state median household income was \$27,016.

Health Insurance Coverage

Figure 3.6c reflects insurance coverage among Houston assessment participants under age 65.



Comparative data from the National Health Interview Survey are grouped according to region--Northeast, Midwest, South, and West. Houston is in the Southern region.

Houston participants are less likely to have health insurance than the general population in the South, and less likely to be covered by both private insurance and Medicaid. Four (4 percent) of the 108 Houston project participants are age 65 and over. Of these, all have health insurance coverage.

Types of Health Facilities Used

Houston participants most often seek health care from a private physician (72.6 percent), and neighborhood or family health center (5.7 percent).

Leading Problems When Seeking Health Care

The five leading problems experienced by Houston assessment participants when seeking health care include: cost (71 percent); no health insurance (29.9 percent); no American Indian/Alaska Native health care providers (29.0 percent); not knowing what services are available (28 percent); and distance required to travel to visit physician (19.6 percent).

SUMMARY OF HOUSTON FINDINGS

Health Status

Heart disease and cancer are the leading causes of death among Houston American Indians/Alaska Natives, followed by accidents and stroke. No infant deaths were reported for the three years analyzed—1988–1990, lending credibility to previous studies which have shown that American Indian/Alaska Native infant deaths are often miscoded according to racial classification (usually as White). Comparable proportions of women in the Houston American Indian/Alaska Native population and in the Houston and Texas general population receive prenatal care in the first trimester. Fewer infants of low birth weight are born to Houston American Indians/Alaska Natives than to the Houston or Texas general population.

Cardiovascular Health

Selected cardiovascular risk factors are more prevalent among Houston assessment participants than among the Texas general population, including obesity and lack of exercise. The proportion of smokers is similar in the two groups. High blood pressure and high cholesterol levels, however, are less prevalent among Houston participants than in the U.S. general population.

Injury Prevention

Selected injury risk factors are higher among Houston assessment participants than among the Texas general population. Lack of **seatbelt** use, and drinking and driving are more prevalent, while binge drinking **is less** prevalent among Houston participants than among the Texas general population.

Diabetes Prevalence and Risk Factors

Houston is the only study site of the six where the proportion of assessment participants who report being diabetic is less than that in the U.S. general population. Three percent of Houston participants report being diabetic, compared to the U.S. estimated prevalence of five percent. Elevated random glucose levels (≥ 115 mg/dL) were found

among 16 percent of participants, over twice the estimated 6.6 percent found in the U.S. general population. And, 40 percent of all assessment participants report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants in Houston meet the Year 2000 National Health Objective for having ever had a Pap test (97 percent screened versus the recommended 95 percent), but do not meet the National Health Objective for having had a Pap test within the past three years (77.3 percent screened versus the recommended screening level of 85 percent).

Houston women participants age 40 and older meet the Year 2000 National Health Objectives for mammogram screening, with 82 percent reporting having had a mammogram at least once, compared to the recommended 80 percent. Twenty-four percent of women participants age 40 and older report having received a mammogram, but not within the past three years.

Men's Health

Houston men assessment participants fall short of meeting American Cancer Society recommendations for yearly rectal exams for prostate cancer screening. Only nine percent of Houston men participants age 40 and older have received a rectal exam within the past year.

Barriers to Care

Income

Houston assessment participants are more likely than the Houston Metropolitan Statistical Area general population to earn annual household incomes of less than \$10,000. Median household income among participants was lower than that for the general population in the Houston MSA (\$27,708 versus \$30,727).

Health Insurance Coverage

Houston assessment participants are less likely than the general population in the South to have health insurance.

Health Care Utilization

The Houston city health department documents a 0.4 percent proportion of its Maternal Child Health services users as American Indians/Alaska Natives. This percentage is

somewhat higher than the proportion of the Houston urbanized area **residents** who are American Indians/Alaska Natives (0.28 percent).

The most commonly mentioned source of health care among Houston participants is a private physician, distantly followed by a neighborhood or family health center.

D. ANAHEIM, CALIFORNIA

History and Backaround

The state of California has over 70 reservations, more than any other state. Most of the reservations are small because the residents are descendants from a single village, and most are located at or near their original village sites (Terrell, 1971).

Southern California's original peoples were the Shoshonean, a family of (at least) twelve Tribes who migrated over many years from lands **east** of the Sierra Nevada to parts of California, including the coastal areas. The first Europeans to travel to California came from Spain, via Mexico, in the mid **1500's**. During this same time period, Spanish missionaries, long active in Mexico, began to establish missions along the California coast. The missions served multiple purposes, but the most often stated was the missionaries' goal to Christianize the Native people. Many Tribes became "**missionized**".

Many of California's American Indians/Alaska Natives now live in urban areas, and represent Tribes from all over the country. Orange County is a largely urban county, south of Los Angeles, with Anaheim as its county seat. The Southern California Indian Center, Inc., is located in nearby Garden Grove, and provides a variety of services to American Indians/Alaska Natives living in Orange County. As a part of this project, the Center hosted two staff persons from the American Indian Health Care Association to conduct Health Risk Appraisals at the Center **for interested community members**.

Census Data

Table 3.1 d reflects 1990 population figures for Orange County.

Table 3.1 d. American Indian/Alaska Native and General Population, Oranae County, 1990.

Total Population	American Indian/Alaska Native Population	Percentage of AI/AN to Total Population
2,410,556	12,165	0.5

Data from 1990 U.S. Census

Meetings with American Indian/Alaska Native Community Leaders

Meetings were held in the Anaheim area with American Indian/Alaska Native community leaders having backgrounds in health management, social services, and education. These individuals include: Hotona Roebuck, advisor to American Indian/Alaska Native students at California State University at Long Beach, and advisor to the Southern California Indian Center, Inc.; Mary Cleghom-Vann, Planner for the Southern California Indian Center, Inc.; and Tom Moffett, Social Services Coordinator for the Southern California Indian Center, Inc. The following is a summary of their responses to questions about the health needs of American Indians/Alaska Natives in their community:

1. Sources of health care for American Indians/Alaska Natives in Anaheim are:
 - a. local hospital clinics;
 - b. the American Indian Free Clinic (formerly in Compton, but now located in Bellflower, 30 miles away); and
 - c. Tribal clinics in San Manuel (50 miles away) and **Morongo** (70 miles away).
2. Major barriers to health care in Anaheim for American Indians/Alaska Natives are:
 - a. cost;
 - b. lack of health insurance;
 - c. high premiums and deductibles for those with insurance;
 - d. lack of transportation; and
 - e. long distances to travel for care.
3. Potential solutions to these barriers are:
 - a. start a clinic for American Indians/Alaska Natives in Orange County; and
 - b. provide ambulatory health care services through a mobile health unit.
4. Types of health care services needed for American Indian/Alaska Native residents in Anaheim include:
 - a. dental;
 - b. preventive health services;
 - c. women's health care;
 - d. optometry; and
 - e. generalized acute medical care.

5. Specific neighborhoods within Orange County where large numbers of American Indian/Alaska Native residents live are:

while the population of American Indians/Alaska Natives is fairly well dispersed throughout the area, Garden Grove, Anaheim, and Santa Ana have neighborhoods with large numbers of American Indian/Alaska Native residents, (This information is anecdotal only, without supportive census tract population figures.)

Meetings with Health Department Officials

A meeting was held on April 6, 1992 with Len Foster, Deputy Director of Public Health, Orange County Health Care Agency. Orange County Health Care Agency provides traditional public health services through a system of five clinics to residents of Orange County. Health care is also available throughout the county at 13 community clinics-- independent non-profits, or satellite clinics affiliated with the University of California at Irvine.

Orange County Health Care Agency collects service utilization information by race for some, but not all, of its programs. Table 3.2d presents information on use of Orange County Health Agency services by American Indian/Alaska Native residents for the 1990-91 Fiscal Year.

Table 3.2d. Use of Orange County Health Agency Services by American Indian/Alaska Native Residents, FY 1990-91.

Program	American Indian/Alaska Native Visits in 1990/91
Child -Health	1
Dental Services	13
Elder Care	0
Maternal Health	6
Prenatal Care	0
Immunizations	60
Inoculations	126
Total	206

While information presented in Table 3.2d is incomplete because it includes only a partial listing of services provided by Orange County Health Agency, it's noteworthy that with a county-wide population of 12,165 American Indian/Alaska Native residents, so few (206) use services provided through Orange County's public supported health agency.

Mortality Data

Using data supplied by the National Center for Health Statistics, an analysis of causes of death among American Indians/Alaska Natives in Anaheim was completed by the American Indian Health Care Association for years 1985-1987. Table 3.3d reflects the causes of death for Anaheim American Indians/Alaska Natives for the three years. These data are available for the city of Anaheim only, not for the entire Orange County American Indian/Alaska Native population. While providing information on the leading causes of death, the mortality rates themselves are unstable because of the few number of reported deaths (n= 14).

Table 3.3d American Indian/Alaska Native Mortality Rates. Anaheim. 1985-1987.

Cause of Death	Mortality Rate(Per 100,000 Persons)
Diseases of the Heart	66.93
Malignant Neoplasms	44.62
Chronic Liver Disease and Cirrhosis	44.62
Ulcer	22.31
Accidents	22.31
Suicide	22.31
Cerebrovascular Disease	22.31
Other Causes	89.24
ALL CAUSES (n=14)	312.34

Data from NCHS, 1985-1987, analyzed by American Indian Health Care Association, 1992. Mortality rates are crude rates, and not adjusted according to age.

The leading cause of death for Anaheim American Indians/Alaska Natives is heart disease, followed by cancer, accidents, and cerebrovascular disease (stroke).

Health indicator Data

Information on selected health indicators is available for the Anaheim area on a county-wide basis. Table 3.4d reflects the most recent health indicator data available for Orange County. To improve the accuracy of rates and percentages for the selected indicators, three years of data were compiled for Orange County and California state American Indian/Alaska Native residents. All Races data for Orange County and the state as a whole are reported for a single year--1990.

Table 3.4d. Selected Health Indicator Data. Orange County American Indian/Alaska Native, California American Indian/Alaska Native, Orange County All Races, California All Races.

Health Indicator	American Indian/Alaska Native, Data for 3 years		All Races, Data for 1990	
	Orange County	CA State	Orange County	CA State
Birth Rate (live births per 1000 population), per year	14.0*	N.A.	21.1	20.4
% Births to women who received prenatal care in 1 st trimester	72*	68.3+	73.9	71.7
% low birth weight infants (<2500 Grams)	4.1*	6.4+	5.2	5.8
infant mortality rate (infant deaths per 1000 live births), per year	25.4* (n=13)	10.3-	7.8	7.9

Data obtained from Orange County Health Care Agency and California Department of Vital Statistics

*Data for 3 year period 1988-1990

+Data for 3 year period 1986-1988

-Data for 3 year period 1984-1986

Infant mortality rates are important indicators of the health status of selected groups of people. While the infant mortality rate among Anaheim American Indians/Alaska Natives is almost three times that of the Orange County general population, the rate is unstable because of the small number of reported American Indian/Alaska Native infant deaths in Anaheim (n= 13). The percentage of Orange County American Indian/Alaska Native women who receive early prenatal care is comparable to that of the general population of Orange County, while the percentage of low birth weight babies born to Orange

County American Indian/Alaska Native women is somewhat less than for the general population of Orange County. The overall birth rate is lower among Orange County American Indians/Alaska Natives than among the general population.

Health Risk Appraisals

Health Risk Appraisals were conducted April 6-9, 1992 at the Southern California Indian Center, Inc., in Garden Grove, California. Health Risk Appraisal data are presented on selected health risk behaviors for which comparative data are available. In the area of cardiovascular health, information is presented on smoking, sedentary lifestyle, and obesity. In the area of safety, data are presented on lack of **seatbelt** use, drinking and driving, and binge drinking. The 1990 California Behavioral Risk Factor Surveillance System (BRFSS) provides comparative data.

Additional information is presented on women's health, men's health, diabetes, income, health insurance coverage, and access to health care issues, for which comparative data are provided by the National Center for Health Statistics and the Year 2000 Health Promotion and Disease Prevention Objectives for the Nation.

Participant Characteristics

Figure 3.1 d reflects selected demographic characteristics of persons participating in the assessment in Anaheim, California.

**Figure 3.1d - Demographics of Anaheim
Assessment participants**

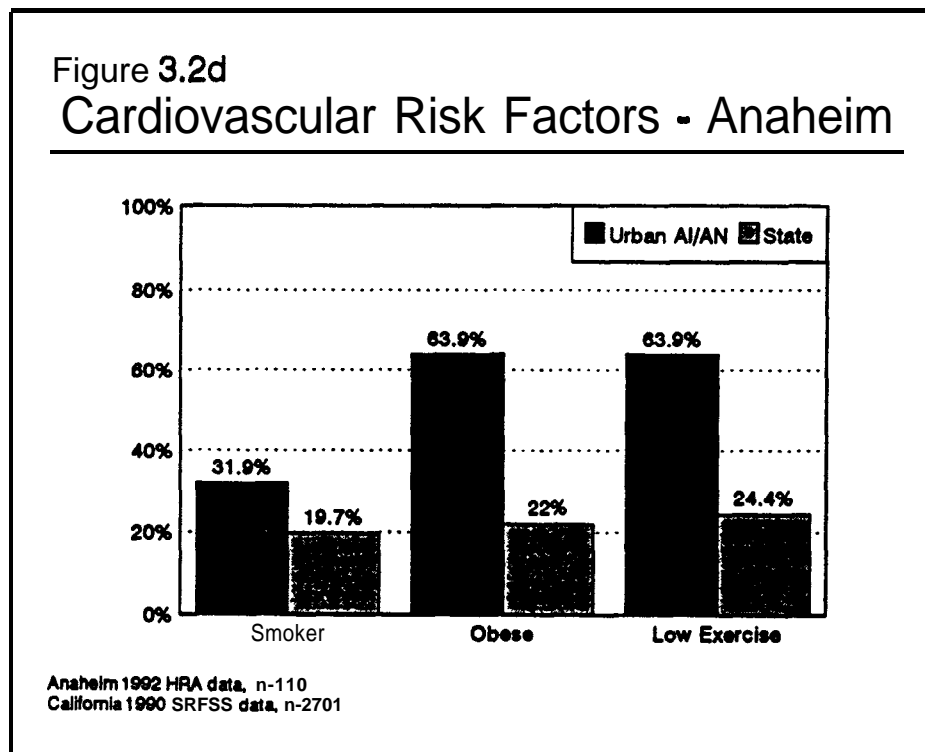
*	Age	Median Range	45 20-83
*	Sex	Female Male	71.4% 28.6%
*	Employment	Unemployed Employed Student Retired Homemaker	15.5% 37.1% 5.2% 27.6% 14.7%
*	Education	Some High School High School Grad College Grad	18.1% 27.6% 13.8%
*	Ethnicity	Full-blood < Full-blood	28.6% 71.5%
*	Tribes (38 Total)	Sioux Chippewa Cherokee Other	8.4% 7.6% 7.6% 76.4%

Number of participants = 119

The median age of Anaheim assessment participants is 45, and 71 percent are women. Twenty-eight percent of assessment participants have high school diplomas, while fourteen percent have college degrees. Thirty-seven percent are employed either full or part time. Twenty-nine percent are full blood American Indian/Alaska Native. The three Tribes most often represented-Sioux, Chippewa, and Cherokee--comprise only 27 percent of the total Anaheim participants, indicating the diversity of the Anaheim American Indian/Alaska Native community.

Cardiovascular Risk Factors

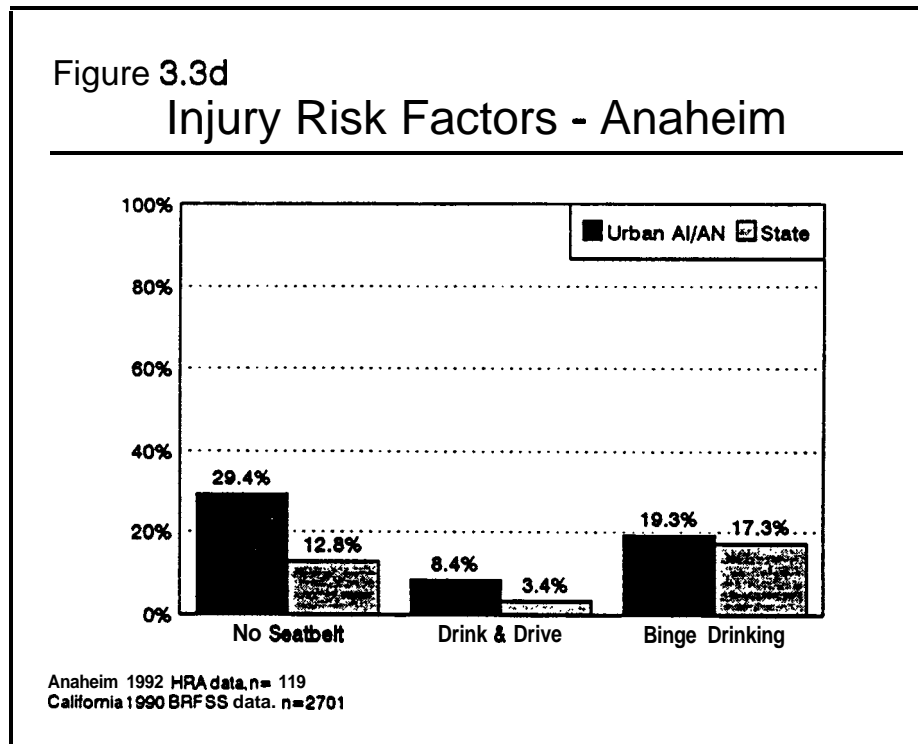
Figure 3.2d reflects the proportion of Anaheim assessment participants with selected cardiovascular risk factors compared to that of the California general population.



Smoking, obesity, and lack of exercise are all risk factors that contribute to the development of heart disease. All three factors are more prevalent among Anaheim assessment participants than among the California state population as a whole. In addition, 31 percent of Anaheim participants have a high blood pressure reading, seventeen percent **have** a blood **cholesterol** of ≥ 240 mg/dL (high), and 32.1 percent **have** a blood cholesterol of 200-239 mg/dL (borderline high). For comparative purposes, the Year 2000 National **Objectives** for Health Promotion and Disease Prevention recommend no more than 20 percent of all adults have blood cholesterol levels of 240 mg/dL or greater.

Injury Risk Factors

Figure 3.3d reflects the proportion of Anaheim assessment participants with selected injury risk factors compared to that of the California general population.



Anaheim assessment participants are almost three times less likely to use their seatbelts, twice as likely to drink and drive, and slightly more likely to binge drink than the California general population.

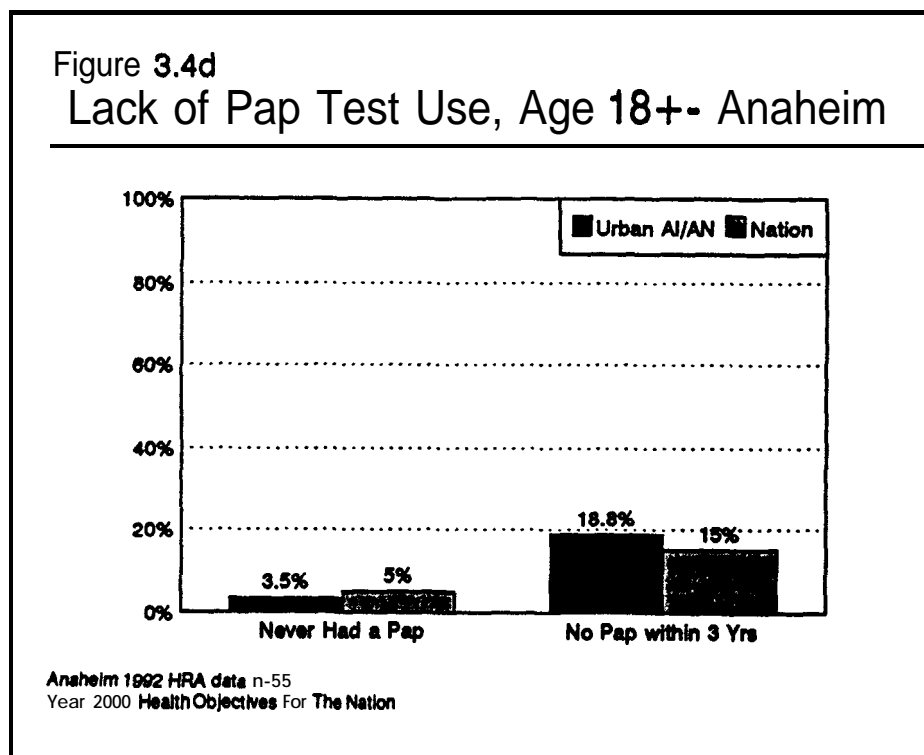
An additional risk factor for injury or death resulting from a motor vehicle accident is driving over the speed limit. Twenty-eight percent of Orange County participants typically drive 6-10 miles per hour over the speed limit, while eight percent drive at least 11 miles per hour over the speed limit.

Diabetes

Thirteen percent of Anaheim assessment participants report they are diabetic, compared to a national estimate of five percent among the general population. In addition, **forty-eight** percent of participants have a family history of diabetes, and seventeen percent have an elevated blood glucose (compared to an estimated U.S. total population of 6.6 percent).

Women's Health

Figure 3.4d reflects the lack of use of Pap test use among Anaheim women assessment participants age 18 and over.



Of 119 Anaheim participants, 85 (71 percent) are women age 18 and over. Of these women, 3.5 percent have never had a Pap test, and nineteen percent have not had one within the last three years. Anaheim women participants' use of Pap tests is well within the Year 2000 National Health Objective of 95 percent for having ever had a Pap test, and close to the recommended 85 percent for having had a Pap test within the past three years.

The American Cancer Society 'recommends that women age 40 and older receive mammograms to screen for breast cancer every one to two years, then yearly beginning at age 50. Among Anaheim participants, 51 (43 percent) are women age 40 and older. Of these, 24 percent have never received a mammogram, while 10 percent have received one, but not within the past three years.

Men's Health

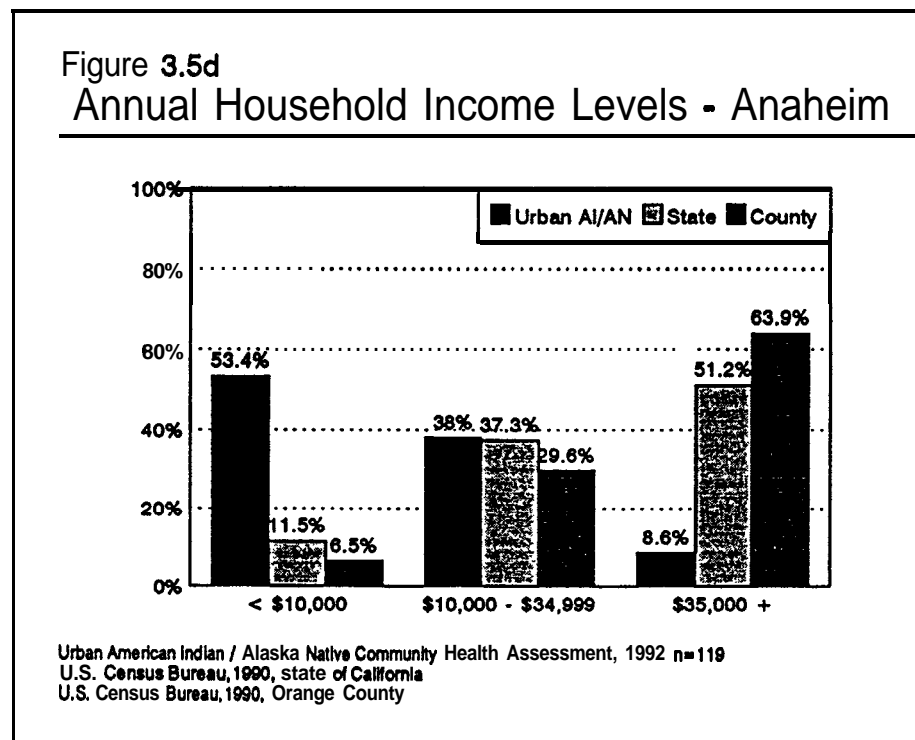
The American Cancer Society recommends yearly rectal exams for men age 40 and older as a screening for prostate cancer. Of Anaheim participants, 21 (18 percent) are

men age 40 and older. Of these, 43 percent have had a rectal exam within the past year, 10 percent have had an exam but not within the past three years, and ten percent have never had a rectal exam.

Community Health Assessment

Income

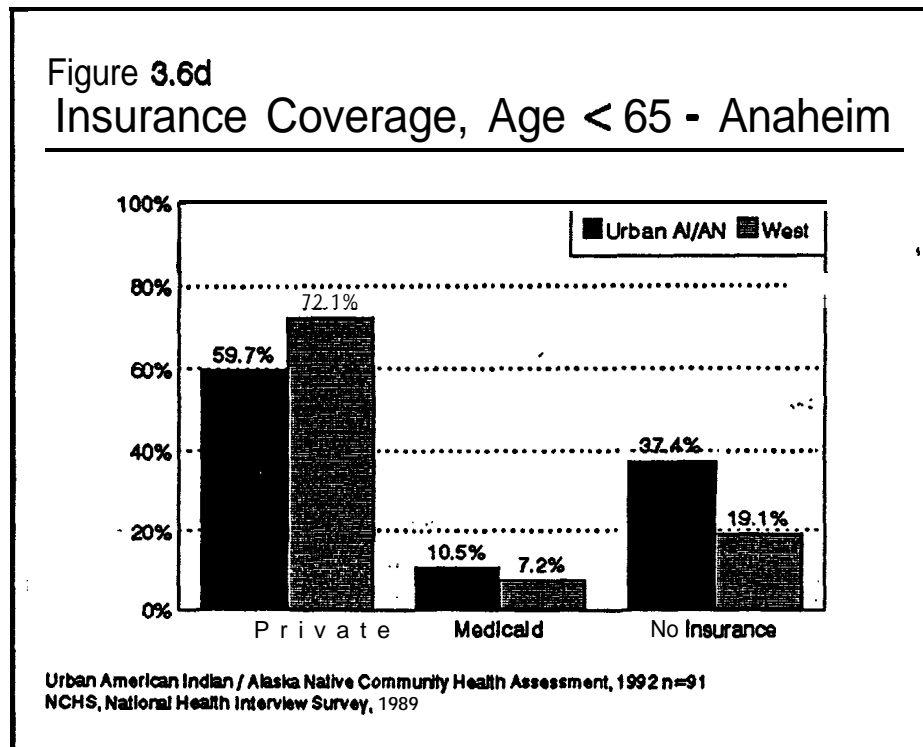
Figure 3.5d reflects income levels for Anaheim assessment participants compared to the general populations of California and Orange County.



Anaheim assessment participants are five times more likely than the California general population, and eight times more likely than the Orange County general population to earn less than \$10,000 a year. Only nine percent of Anaheim participants earn \$35,000 or more a year, while over half of the California general population and 64 percent of the Orange County general population earn more than \$35,000 a year. The median household income for participants was \$9,354, while the median household income was \$45,922 for the Orange County general population and \$35,798 for the California general population.

Health Insurance Coverage

Figure 3.6d reflects health insurance coverage among Anaheim assessment participants below age 65. Comparative data from the National Health Interview Survey are grouped according to region--Northeast, Midwest, South, and West. Anaheim is in the Western region.



Anaheim assessment participants are half as likely as the general population in the West to **have** health insurance. Anaheim participants are more likely to be covered by **Medicaid**, and less likely to have private health insurance.

Types of Health Facilities Used

Anaheim assessment participants most often seek health care at the following types of health facilities: private physician (51.3 percent); Indian Health Service or urban Indian clinic (21.7 percent); and neighborhood or family health center (7.8 percent).

Leading Problems When Seeking Health Care

The five leading problems experienced by Anaheim participants when seeking health care include: cost (**60.3** percent); lack of health insurance (31.9 percent);- distance needed to travel to see doctor (31 percent); lack of American Indian/Alaska Native

providers (27.6 percent); and lack of trust in mainstream health care providers (42.1 percent).

SUMMARY OF ANAHEIM FINDINGS

Health Status

Heart disease and cancer are the leading causes of death among Anaheim American Indians/Alaska Natives, followed by accidents and stroke. Slightly fewer Orange County American Indian/Alaska Native women receive prenatal care in the first trimester than do women in the Orange County general population. However, when compared to the Orange County general population, fewer American Indian/Alaska Native infants are born with a low birth weight.

Cardiovascular Health

Selected cardiovascular risk factors are more prevalent among Anaheim assessment participants than among the California general population. Smoking, obesity, and lack of exercise are all more prevalent among Anaheim participants than among the California general population. High blood pressure and high cholesterol levels, however, are less prevalent among participants in Anaheim than in the U.S. general population.

Injury Prevention

Selected injury risk factors are higher among Anaheim assessment participants than among the California general population. Lack of **seatbelt** use, drinking and driving, and binge drinking are all higher among Anaheim participants than among the California general population.

Diabetes Prevalence and Risk Factors

Thirteen percent of Anaheim assessment participants report being diabetic, which is two and a half times that of the estimated five percent in the U.S. general population. Elevated random glucose levels (≥ 115 mg/dL) were found among 17 percent of participants, two and half times the estimated 6.6 percent in the U.S. general population. And, 48 percent of all participants report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants in Anaheim meet the Year 2000 National Health Objective for having ever had a Pap test with 95.6 percent screened compared to the recommended screening level of 95 percent. They come close to meeting the National

Health Objective for having had a Pap test within the past three years, with 81.2 percent screened compared to the recommended screening level of 85 percent.

Anaheim women participants age 40 and older do not meet the Year 2000 National Health Objective for mammogram screening, with 76 percent reporting having had a mammogram at least once (compared to a recommended screening level of 80 percent), while ten percent have had a mammogram, but not within the past three years.

Men's Health

Of men participants in all six cities, Anaheim participants (along with those in St. Louis) come closest to meeting American Cancer Society screening recommendations. **Forty-three** percent of Anaheim men participants age 40 and older report having had a rectal exam within the past year.

Barriers to Care

Income

Anaheim assessment participants are five times more likely than the Orange County general population to earn annual household incomes of less than \$10,090. And, Orange County residents in the general population are over seven times more likely than Anaheim participants to earn annual household incomes of \$35,000 or more. Median household income among participants was \$9,354, compared to the county-wide median household income of \$35,798.

Health Insurance Coverage

Anaheim assessment participants are 50 percent less likely than the general population in the West to have health insurance.

Health Care Utilization

The Orange County Health Agency documents few of its users as American Indians/Alaska Natives.

The most commonly mentioned source of health care among Anaheim participants is a private physician, Indian Health Service (or urban) clinic, and neighborhood or family health center.

E. SAN ANTONIO

History and Backaround

The Caddoan peoples made their homes in the lands now identified as eastern Texas. They clustered in small villages along rivers, and in the **1500s**, occupied parts of East Texas and Louisiana, where they lived in more than 20 towns joined within three confederacies, the Hasinai, Caddos, and Natchitoches (Lowry, 1992.) The Wichita Tribe lived west of the Caddos, while the area near San Antonio was the land of the Coahuiltecan.

By the late 1700s and early **1800s**, many eastern American Indian Tribes-the Alabama, Cherokee, Choctaw, Coushatta, Delaware, Kickapoo, and Shawnee-had been pushed out of their homelands into Texas. In 1886, Texas leader Sam Houston signed a treaty granting the Cherokee title to land in northeast Texas, but the First Congress rejected the treaty the following year. Houston's successor, Mirabeau Lamar, developed policies of displacement and extermination toward the Native people of Texas, and pursued them with vigor. Wars erupted, and many people were killed. An alternative to fighting was to become "missionized" by the Catholic priests. Those who chose this option usually took Spanish last names.

When Texas became a state in 1845, it retained rights to its public land, which meant that the federal government had no land to give to American Indians living in Texas. By **the end of the 1800s, Lamar's goal of extermination had almost been achieved.** Those American Indians who had not been killed or had died from disease were moved to Oklahoma Territory. Those who had adopted Catholicism often identified more with Mexican than with American Indian/Alaska Native culture (**Vasquez** y Sanchez, 1992). Today, there are three remaining American Indian communities within Texas state boundaries, all three reservations recognized by the federal government: the Kickapoo Traditional Tribe of Texas in Eagle Pass; the Alabama-Coushatta Tribe of Texas in Livingston; and the Ysleta del Sur Pueblo on the Tigua Indian Reservation in El Paso.

Census Data

Table 3.1e reflects 1990 population figures for the San Antonio urbanized area.

Table 3.1e. American Indian/Alaska Native and General Population, San Antonio, 1990.

Total Population	American Indian/Alaska Native Population	Percentage of AI/AN to Total Population
1.129.154	4,094	0.36

Data from 1990 U.S. Census

Meetings with American Indian/Alaska Native Community Leaders

Meetings were held in San Antonio with American Indian/Alaska Native community leaders having backgrounds in law and education. These individuals include: **Ardena** Rodriguez, past president of the San Antonio Council of Native Americans; and **Tricia** Tingle (phone interview), President of the First American Bar of Texas. The following is a summary of their responses to questions about the health needs of American Indians/Alaska Natives in their community.

1. Sources of health care for American Indian/Alaska Native residents in San Antonio are:
 - a. private physicians (for those with health insurance);
 - b. hospital outpatient clinics; and
 - c. military base hospitals and clinics.
2. Major barriers to health care for American Indians/Alaska Natives in San Antonio are:
 - a. cost;
 - b. lack of health insurance; and
 - c. not knowing what services are available in San Antonio.
3. Potential solutions to these barriers include:
 - a. establishment of a center from which information can be disseminated.

4. Types of health care services needed for American Indian/Alaska Native residents in San Antonio are:
 - a. dental;
 - b. preventive health services;
 - c. prenatal and obstetrical care;
 - d. women's health;
 - e. medical management of chronic illness; and
 - f. health education.
5. Particular neighborhoods in San Antonio with large numbers of American Indian/Alaska Native residents include:

The population of American Indians/Alaska Natives is fairly well dispersed throughout the San Antonio community. (This information is anecdotal only, without supportive census tract population figures.)

Meetings With Health Department Officials

The San Antonio Metropolitan Health District is unable to provide information on selected health indicators, or use of the health district's services by American Indian/Alaska Native residents. San Antonio Health District collects, but does not extract, health indicator data for American Indians/Alaska Natives. Information on use of the health district's services is not collected for American Indians/Alaska Natives. For the purposes of this project, the state of Texas was able to supply some information on selected health indicators for the San Antonio area.

The University of Texas Health Science Center, University Clinics, also provides health services to San Antonio residents. However, according to the Center's Clinic Manager, they do not collect data on race of service users.

Mortality Data

Using data supplied by the National Center for Health Statistics, an analysis of causes of death among American Indians/Alaska Natives in San Antonio was completed by the American Indian Health Care Association for years 1985-1987. Table 3.2e reflects the causes of death for San Antonio American Indians/Alaska Natives for the three years. While providing information on the leading causes of death among American Indians/Alaska Natives, the mortality rates themselves are unstable because of the few numbers of deaths analyzed (n=2).

Table 3.28 American Indian/Alaska Native Mortality Rates. San Antonio, Texas, 1985-1987.

Cause of Death	Mortality Rate (Per 100,000 Persons)
Diseases of the Heart	16.50
ALL CAUSES	16.50

Data from NCHS, 1985-1987, analyzed by American Indian Health Care Association, 1992. Mortality rates are crude rates, and not adjusted according to age.

The leading cause of death for San Antonio American Indian/Alaska Native residents is heart disease. The "n" of two over a three year period for all American Indian/Alaska Native deaths in San Antonio is an example of the propensity for error in coding of race on death certificates of American Indians/Alaska Natives.

Health Indicator Data

The most recent health indicator data for San Antonio American Indians/Alaska Natives from the Texas Department of Health were available for a two year period only, 1989-90. Except for infant mortality information, data were unavailable **for American Indians/Alaska Natives statewide**. Table 3.3e reflects selected health indicators, with time periods indicated.

Table 3.3e. Selected Health Indicator Data. San Antonio American Indian/Alaska Native. Texas American Indian/Alaska Native, San Antonio All Races, Texas All Races.

Health Indicator	American Indian/Alaska Native, Data for 2 years		All Races, Data for 1990	
	San Antonio	TX State	San Antonio	TX State
Birth Rate (live births per 1000 population), per year	6.4*	N.A.	20.1	18.6
% Births to women who received prenatal care in 1st trimester	73.8*	N.A.	75.7	68.4
% low birth weight infants (≤ 2500 Grams)	4.8*	N.A.	6.9	7.0
infant mortality rate (infant deaths per 1000 live births), per year	0+	0+	6.8	8

Data obtained from Texas Department of Health, Bureau of State Health Data and Policy Analysis

*Data for 2 year period, 1989-90

+No recorded infant American Indian/Alaska Native deaths for 3 year period, 1988-1990

The birth rate among San Antonio American Indian/Alaska Native residents is less than one-third that of the San Antonio general population. The percentage of American Indian/Alaska Native women in San Antonio who receive early prenatal care is less than women in the San Antonio general population, as is the percentage of babies who are born with a low birth weight. There are no recorded American Indian/Alaska Native infant deaths in San Antonio (or in the entire state of Texas) for years 1988-1990.

Health Risk Appraisals

The San Antonio Council of Native Americans is the only American Indian/Alaska Native organization in San Antonio. There is no Indian center in San Antonio, so the Council holds its monthly meetings at Centro Cultural Aztlan, a **Latino** cultural center. In April of 1992, the Center's staff hosted two staff persons from the American Indian Health Care Association to conduct Health Risk Appraisals and Community Health Assessments **for interested community members**.

Participation in the study was low (a total of 31 participants). Reasons for this are only speculative, but possible causes are:

1. There is no identifiable geographical American Indian/Alaska Native community in San Antonio;
2. Centro Cultural **Aztlan** (where the **HRAs** and Community Health Assessments were conducted) is in the southwestern section of the city, and not in a central location for **easy** access without private transportation;
3. A large number of American Indians/Alaska Natives in San Antonio strongly identify with the **mexican** community. And, often when potential participants were asked if they were American Indian/Alaska Native, the response was **"yes"**, but if the same person was asked if she were American Indian the reply was often **"no"**; and
4. Some miscommunication on the part of the Association staff with regard to the dates during which the study was conducted; at least a few interested persons missed out because of this.

Health Risk Appraisal data are presented on selected health risk behaviors for which comparative data are available. In the area of cardiovascular health, information is presented on smoking, sedentary lifestyle, and obesity. In the area of safety, data are presented on lack of **seatbelt** use, drinking and driving, and binge drinking. The 1990 Texas Behavioral Risk Factor Surveillance System (BRFSS) provides comparative data.

Additional information is presented on women's health, men's health, diabetes, income, health insurance coverage, and access to care issues, with national comparative data from the National Center for Health Statistics and the Year 2000 Health Promotion and Disease Prevention Objectives for the Nation.

Participant Characteristics

Figure 3.1 e reflects selected demographic characteristics of persons participating in the assessment in San Antonio.

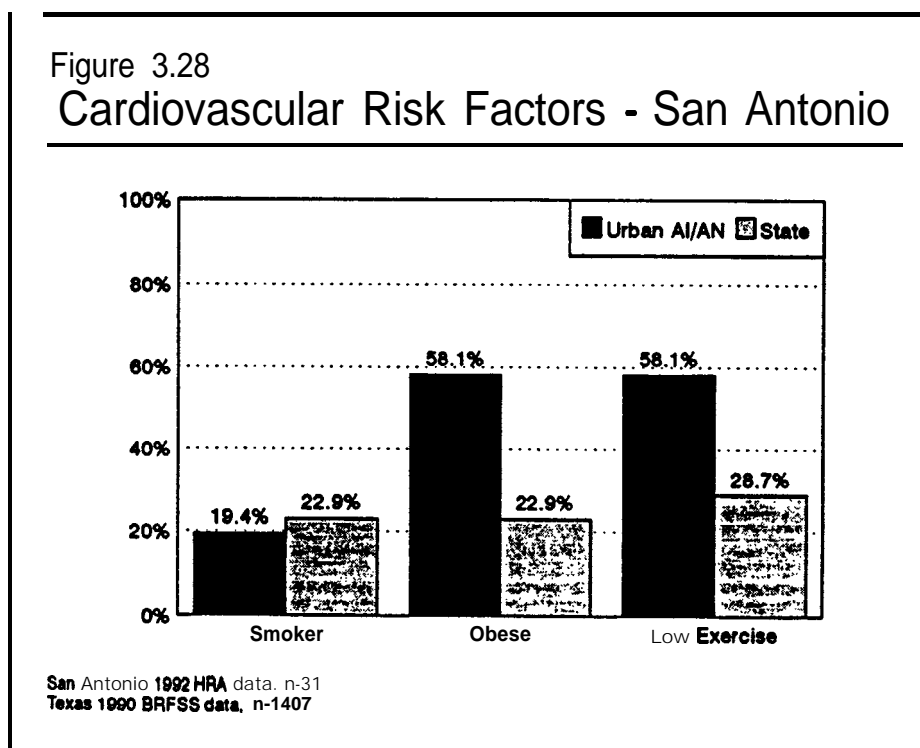
Figure 3.18 • Demographics of San Antonio Assessment participants			
*	-Age	Median	54
		Range	27-83
*	Sex	Female	41.9%
		Male	58.1%
*	Employment	Unemployed	9.7%
		Employed	48.4%
		Student	6.5%
		Retired	32.3%
		Homemaker	9.7%
*	Education	Some High School	13.8%
		High School Grad	13.8%
		College Grad	17.2%
		Post Graduate	20.7%
*	Ethnicity	Full-blood	9.7%
		< Full-blood	90.4%
*	Tribes (10 Total)	Cherokee	22.6%
		Cheyenne	16.1%
		C h o c t a w	9.7%
		Other	51.6%
Number of participants = 31			

The median age of 54 for San Antonio assessment participants is older than for assessment participants across all six sites. San Antonio is the only site where men participants outnumber women (58 percent versus 42 percent). Forty-eight percent are employed, seventeen percent have college degrees, and twenty-one percent have

graduate or professional degrees. Ten percent are full blood American Indian/Alaska Native. The three Tribes most often represented-Cherokee, Cheyenne, and Choctaw--comprise 48 percent of the total San Antonio participants.

Cardiovascular Risk Factors

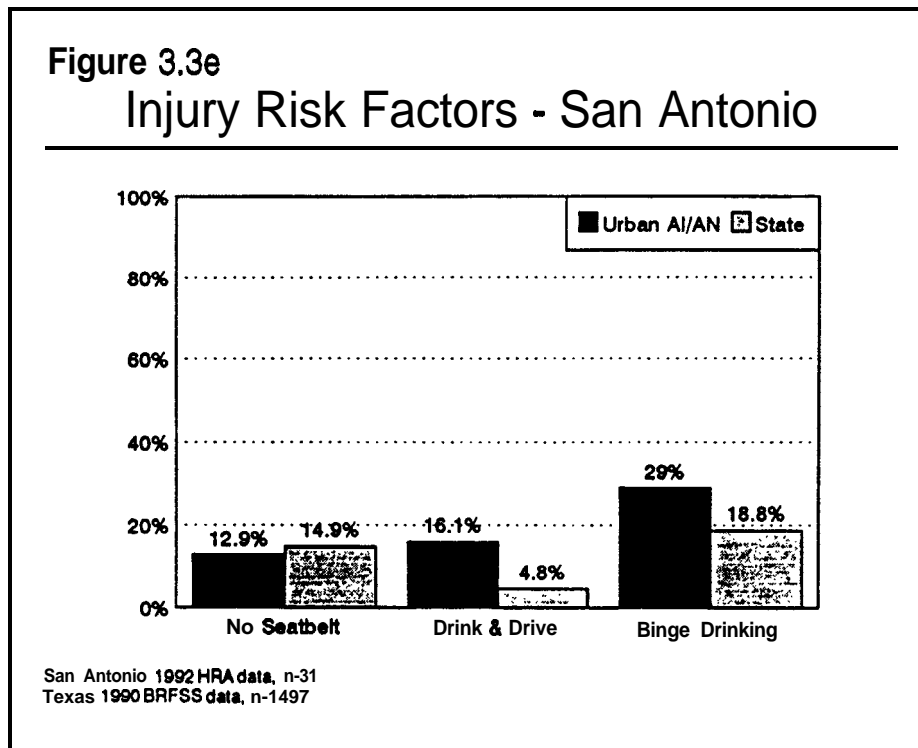
Figure 3.2e reflects the proportion of San Antonio assessment participants with selected cardiovascular risk factors compared to those of the Texas state general population.



Smoking, obesity, and lack of risk exercise are all factors that contribute to the development of heart disease. San Antonio assessment participants are slightly less likely to smoke, but more **likely** to be obese and to exercise too little than the Texas general population. In addition, 39 percent of San Antonio participants have a high blood pressure reading, thirteen percent have a blood cholesterol of ≥ 240 mg/dL (high), and 19.4 percent have a blood cholesterol of 200-239 mg/dL (borderline high). For comparative purposes, the Year 2000 National Objectives for Health Promotion and Disease Prevention recommends no more than 20 percent of all adults have blood cholesterol levels of 240 mg/dL or greater.

Injury Risk Factors

Figure 3.3e reflects the proportion of San Antonio assessment participants with selected injury risk factors compared to those of the Texas state general population.



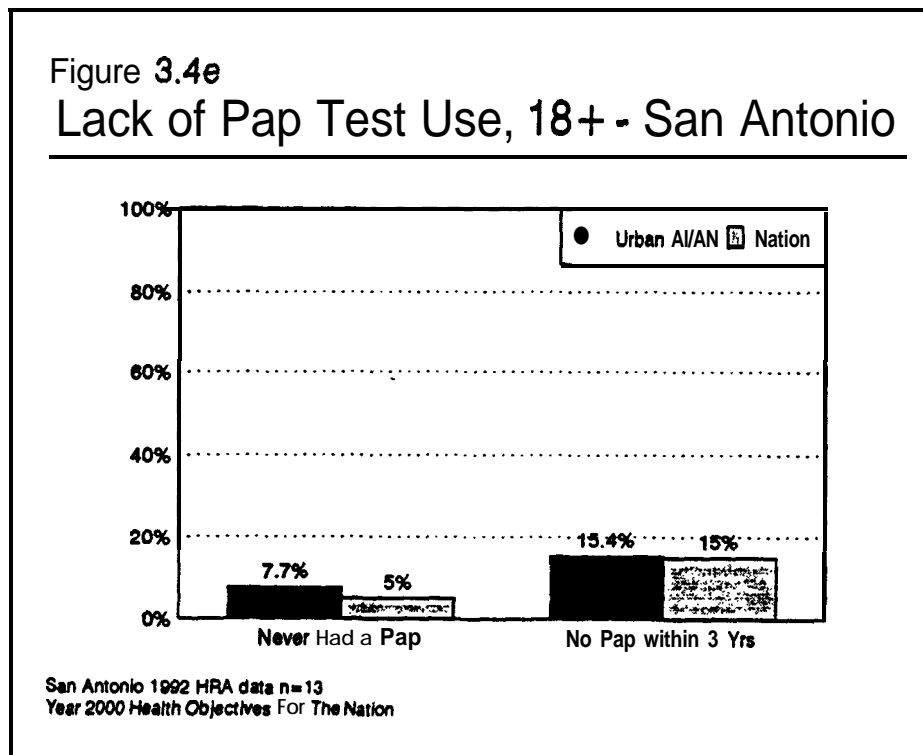
San Antonio assessment participants use their seatbelts more often than the Texas general population, but are over three times more likely to drink and drive, and one a half times more likely to binge drink.

Diabetes

Sixteen percent of San Antonio assessment participants report they are diabetic, compared to the national estimate of five percent in the general population. In addition, fifty percent of San Antonio participants have a family history of diabetes, and 29 percent have an elevated blood glucose (compared to a national estimate of 6.6 percent).

Women's Health

Figure 3.4e reflects lack of Pap test use among San Antonio women assessment participants age 18 and older.



Of the 31 participants, thirteen (42 percent) are women age 18 and over. Of these women, eight percent have never had a Pap test, and 15.4 percent have had one, but not within the past three years. These numbers indicate a fairly good use of Pap tests among San Antonio women participants.

The American Cancer Society recommends that women age 40 and older receive mammograms to screen for breast cancer every one to two years, then yearly beginning at age 50. Among San Antonio participants, nine (29 percent) are women age 40 and older. Of these, 11 percent have never received a mammogram, and 22 percent have received one, but not within the past three years.

Men's Health

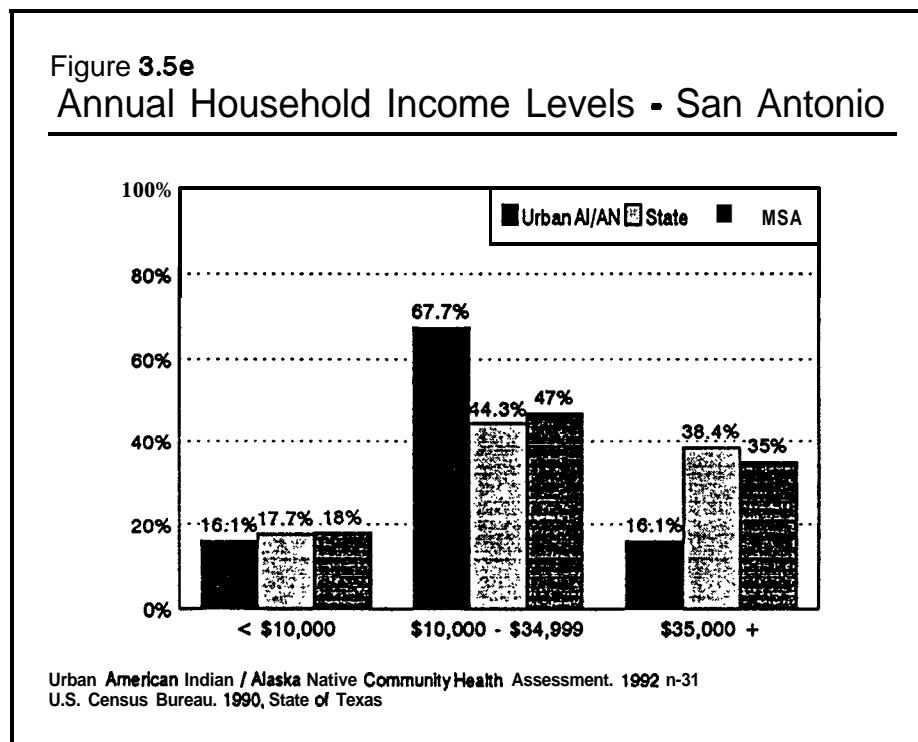
The American Cancer Society recommends yearly rectal exams for men age 40 and older as a screening for prostate cancer. Of San Antonio participants, 15 (48 percent) are men age 40 and older. Of these, seven percent have had a rectal exam within the

past year, and 67 percent have had an exam, but not within the past three years. All report having had a rectal exam at some time in the past.

Community Health Assessment

Income

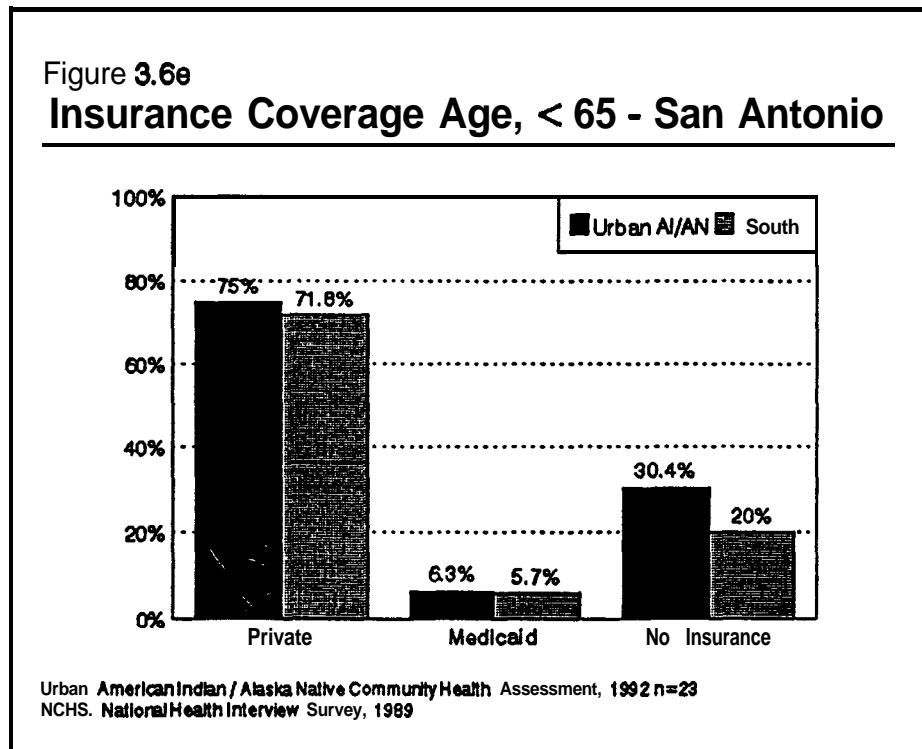
Figure 3.5e reflects income levels for San Antonio assessment participants compared to the general population of Texas and the San Antonio MSA.



San Antonio assessment participants are about as likely as the local and state general population to earn less than \$10,000 a year, more likely to earn in the middle range of \$10,000-\$34,999, and half as likely to earn \$35,000 or more. The median household income for San Antonio participants was \$15,833, while the median household income for the general population in the San Antonio MSA was \$26,092, and \$27,016 statewide.

Health Insurance Coverage

Figure 3.6e reflects insurance coverage among San Antonio assessment participants below age 65.



Comparative data from the National Health Interview **Survey** are grouped according to region--Northeast, Midwest, South, and West. San Antonio is in the Southern region.

San Antonio American participants are less likely than the general population in the **South** to have health insurance. Coverage by private insurance and by Medicaid is **comparable** between the two groups.

Eight (26 percent) of all San Antonio participants are age 65 or older. Of these, three (10 percent) have no health insurance. Of those with health insurance, all have Medicare, private insurance, or a combination of the two.

Types of Health Facilities Used

San Antonio assessment participants most often seek health care at the following types of health facilities: private physician (51.6 percent); hospital outpatient clinic (12.9 percent); and neighborhood or family health center (9.7 percent).

Leading Problems When Seeking Health Care

The **five** leading problems experienced by San Antonio participants when seeking health care include: cost (41.9 percent); not knowing what types of services are available (29 percent); lack of American Indian/Alaska Native health care providers (29 percent); lack of understanding among mainstream providers of the health needs of American Indians/Alaska Natives (22.6 percent); and lack of trust in mainstream providers (12.9 percent).

SUMMARY OF SAN ANTONIO FINDINGS

Health Status

Heart disease is the leading cause of death among San Antonio American Indians/Alaska Natives. No American Indian/Alaska Native infant deaths were reported in the state of Texas for years 1988-1990, lending credibility to previous studies which have shown that American Indian/Alaska Native deaths are often miscoded according to racial classification (usually as White).

Slightly fewer American Indian/Alaska Native women in San Antonio than women in the San Antonio general population receive prenatal care in the first trimester, and fewer low birth weight infants are born to San Antonio American Indian/Alaska Native women than to women in the San Antonio general population.

Cardiovascular Health

Selected cardiovascular risk factors are more prevalent among San Antonio assessment participants than among the Texas general population. Obesity, lack of exercise and high blood pressure are all more prevalent among San Antonio participants than among **comparative** groups. High cholesterol levels, however, are less prevalent for participants in San Antonio than in the U.S. general population.

Injury Prevention

Selected injury risk factors are more prevalent among San Antonio assessment participants than among the Texas general population. Drinking and driving, and binge drinking are greater among San Antonio participants than among the Texas general population. Lack of **seatbelt** use, however, is lower among San Antonio participants than among Texas residents statewide.

Diabetes Prevalence and Risk Factors

Sixteen percent of San Antonio assessment participants report being diabetic, three times that of the estimated five percent in the U.S. general population. Elevated random glucose levels (≥ 115 mg/dL) were found among 29 percent of participants, over four times the estimated 6.6 percent in the U.S. general population. And, 50 percent of all participants report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants in San Antonio come close but do not meet the Year 2000 National Health Objective for having ever had a Pap test, with a screening level of 92 percent compared to a recommended screening level of 95 percent, and meet the National Health Objective of 85 percent for having had a Pap test within the past three years.

San Antonio women participants age 40 and over meet the Year 2000 National Health Objective for mammogram screening, with 89 percent reporting having had a mammogram at least once, compared to the recommended screening level of 80 percent.

Men's Health

Only seven percent of San Antonio men participants age 40 and over report having had a rectal exam within the past year. **This** falls significantly short of American **Cancer** Society recommendations for yearly prostate cancer screening exams for all men age 40 and over.

Barriers to Care

Income

San Antonio assessment participants are less than half as likely as the San Antonio Metropolitan Statistical Area and Texas state general population to earn household incomes of \$35,000 and more. Median household income among San Antonio participants was \$15,833, compared to the San Antonio MSA and Texas state median incomes of \$26,092 and \$27,016, respectively.

Health Care Utilization

Neither the San Antonio Metropolitan Health District's clinics nor the University of Texas Health Science Center's clinics were able to provide information on its service utilization by American Indians/Alaska Natives. The most commonly mentioned sources of health care among San Antonio assessment participants were a private physician, hospital outpatient clinic, and neighborhood or family health center.

F. ST. LOUIS, MISSOURI

History and Backaround

The Illinois, Missouri, and Osage Tribes occupied land in what is now northeastern Missouri (Terrell, 1971). The Illinois were a confederation of Algonquian Tribes spread over a large area, one site of which was near the magnificent Cahokia Mound, located in Illinois, six miles east of present day St. Louis. The Osage and Missouri were west of the Illinois, and are the only Tribes whose primary homeland was within the current boundaries of Missouri (Reidhead, 1992).

Many American Indians/Alaska Natives living in the St. Louis area today are Cherokee, descendants of those who were forced from their homelands in the eastern states and moved to Oklahoma (Voelker, 1992). As part of the federal government's official policy in the 1950s to relocate American Indians/Alaska Natives to urban areas, St. Louis was a designated relocation city (Prucha, 1984). Many present day American Indian/Alaska Native residents of St. Louis are persons or descendants of those who were relocated during the 1950s and later.

For this project, the American Indian Center of Mid-America, Inc., St. Louis, Missouri, hosted two staff persons from the American Indian Health Care Association in April, 1992 to conduct Health Risk Appraisals and Community Health Assessments for interested community members. (See Appendix A for more information on the American Indian Center of Mid-America, Inc.)

Recent Research

The American Indian Center of Mid-America, Inc. participated with the U.S. Bureau of The Census and the University of Missouri-St. Louis in a 198889 study of St. Louis area American Indians/Alaska Natives and the Census (Reidhead, 1990). The principal aim of this study was to provide data that can be used by the Bureau of the Census to evaluate problems American Indians/Alaska Natives experience with the Census. Four hundred and six American Indian/Alaska Native residents, representing 184 households, participated in this study. Certain demographic information was obtained during the course of this study that provides comparative data for the current project. These data will be referred to, where appropriate, in the narrative component of the section on St. Louis.

Census Data

Table 3.1f reflects 1990 population figures for St. Louis, Missouri.

Table 3.1f. American Indian/Alaska Native and General Population, St. Louis. 1990.

Total Population	American Indian/Alaska Native Population	Percentage of AI/AN to Total Population
1,946,526	3,729	0.2

Data from 1990 U.S. Census

Meetings with American Indian/Alaska Native Community Leaders

Meetings were held in the St. Louis area with American Indian/Alaska Native community leaders having backgrounds in health service delivery, social services, and program management. These individuals include: Evelyn Voelker, Executive Director of the American Indian Center of Mid-America, Inc.; and Sheri Blackwell, Records and Reports Manager for the Grace Hill Neighborhood Health Center. The following is a summary of their responses to questions about the health needs of American Indians/Alaska Natives in their community:

1. Sources of health care for American Indian/Alaska Native residents in St. Louis include:
 - a. Grace Hill Neighborhood Health Center;
 - b. St. Louis Regional Hospital and Ambulatory Care Centers; and
 - c. Deaconess Hospital, St. Anthony's Hospital-both have detoxification programs.
2. Major barriers to health care for American Indians/Alaska Natives in St. Louis are:
 - a. cost;
 - b. lack of health insurance (even for those employed);
 - c. too few American Indian/Alaska Native health care providers, especially for elders;
 - d. lack of transportation; and
 - e. long distance to travel for care.

3. Potential solutions to these barriers include:
 - a. educate mainstream providers and government officials about the health needs of American Indians/Alaska Natives.
4. Types of health care services needed for American Indian/Alaska Native residents in St. Louis are:
 - a. dental;
 - b. preventive health services;
 - c. women's health care;
 - d. health education;
 - e. community outreach;
 - f. pharmacy;
 - g. management of chronic illnesses; and
 - h. generalized acute medical care.
5. Particular neighborhoods in St. Louis with large numbers of American Indian/Alaska Native residents include:

While the population of American Indians/Alaska Natives is fairly well dispersed throughout the city, the south side of St. Louis (near the Indian Center) has large numbers of American Indian/Alaska Native residents. (This information is anecdotal only, without supportive census tract population figures.)

Meetings with Health Department Officials

The city of St. Louis provides ambulatory health care services to its residents through the St. Louis Regional Medical Center and Ambulatory Care Centers. There are no health clinics operated by the St. Louis Health Department. St. Louis residents also can use the Family Care Center of Carondelet, a St. Louis Community Health Center, and Grace Hill Neighborhood Health Center which maintains four (soon to be five) clinic sites.

According to St. Louis Regional Medical Center personnel, the race of its service users is recorded as white, Black, and **Other**. No data are collected specifically for American Indians/Alaska Natives.

Grace Hill Neighborhood Health Center began recording American Indian/Alaska Native users in **1991**, when a total of **386** users identified themselves as American Indian/Alaska Native. Grace Hill makes a special effort to outreach to the American Indian/Alaska Native community, and has three American Indian/Alaska Native staff who are active in this effort (**Ebberle, 1992**).

Mortality Data

Using data supplied by the National Center for Health Statistics, an analysis of causes of death among St. Louis American Indians/Alaska Natives was completed by the American Indian Health Care Association for years **1985-1987**. Table **3.2f** reflects the causes of death for St. Louis American Indians/Alaska Natives for the three years. While providing information on the leading causes of death among St. Louis American Indians/Alaska Natives, the mortality rates themselves are unstable because of the few numbers of deaths analyzed (**n=3**).

Table 3.21 American Indian/Alaska Native Mortality Rates. St. Louis, Missouri. 1985-1987.

Cause of Death	Mortality Rate (Per 100,000 Persons)
Diseases of the Heart	8.89
Cerebrovascular Disease	8.89
Other Causes	8.92
ALL CAUSES	26.70

Data from NCHS, 1985-1987, analyzed by American Indian Health Care Association, 1992. Mortality rates are crude rates, and not adjusted according to age.

The leading causes of death among St. Louis American Indians/Alaska Natives are heart disease and cerebrovascular disease (stroke).

Health indicator Data

To improve the accuracy of rates and percentages for selected indicators, three years of data were compiled for St. Louis and Missouri state American Indian/Alaska Native residents. All Races data for St. Louis and the state as a whole are reported for a single **year--1990**. Table **3.3f** reflects the most recent data available for selected health indicators.

Table 3.3f. Selected Health Indicator Data. St. Louis American Indian/Alaska Native, Missouri American Indian/Alaska Native. St. Louis All Races. Missouri All Races.

Health Indicator	American Indian/Alaska Native, Data for 3 years*		All Races, Data for 1990	
	St. Louis	MO State	St. LOUIS	MO State
Birth Rate (live births per 1000 population), per year	2.6	11.2	21.3	15.5
% Births to women who received Prenatal care in 1 st trimester	44.8	63.8	63.2	77.6
% low birth weight infants (≤ 2500 Grams)	10.3	5.7	11.4	7.1
infant mortality rate (infant deaths per 1000 live births), per year	0+	9.0	12.4	9.4

Data obtained from Missouri State Center for Health Statistics

*Data for 3 year period 1989-1991

+ No reported infant deaths for 1989-1991

No American Indian/Alaska Native infant deaths were reported in St. Louis during the three year period, 1989-1991. The state infant mortality rate for American Indians/Alaska Natives, however, compares closely to that of the Missouri state general population.

The St. Louis American Indian/Alaska Native birth rate is much lower than that of the general population for both St. Louis and Missouri; and for that of the Missouri state American Indian/Alaska Native population. The proportion of St. Louis American Indian/Alaska Native women who receive early prenatal care is much less than that of the three other comparative groups. The percentage of low birth weight infants born to St. Louis American Indian/Alaska Native women is greater than that of American Indians/Alaska Natives and the general population statewide, but slightly less than that of the St. Louis general population.

Health Risk Appraisals

Health Risk Appraisals were conducted April 21-24, 1992 at the American Indian Center of Mid-America, Inc., and April 25 at the Center for American Indian Studies Second Annual PowWow at Washington University.

Health Risk Appraisal data are presented on selected health risk behaviors for which comparative data are available. In the area of cardiovascular health, information is presented on smoking, sedentary lifestyle, and obesity. In the area of safety, data are presented on lack of **seatbelt** use, drinking and driving, and binge drinking. The 1990 Missouri Behavioral Risk Factors Surveillance Survey (BRFSS) provides comparative data.

Additional information is presented on women's health, men's health, diabetes, income, insurance coverage, and access to health care issues. Where available, national comparative data are provided from the National Center for Health Statistics and the Year 2000 Health Promotion and Disease Prevention Objectives for the Nation.

Participant Characteristics

Figure 3.1f reflects selected demographic characteristics of persons participating in the study in the St. Louis area.

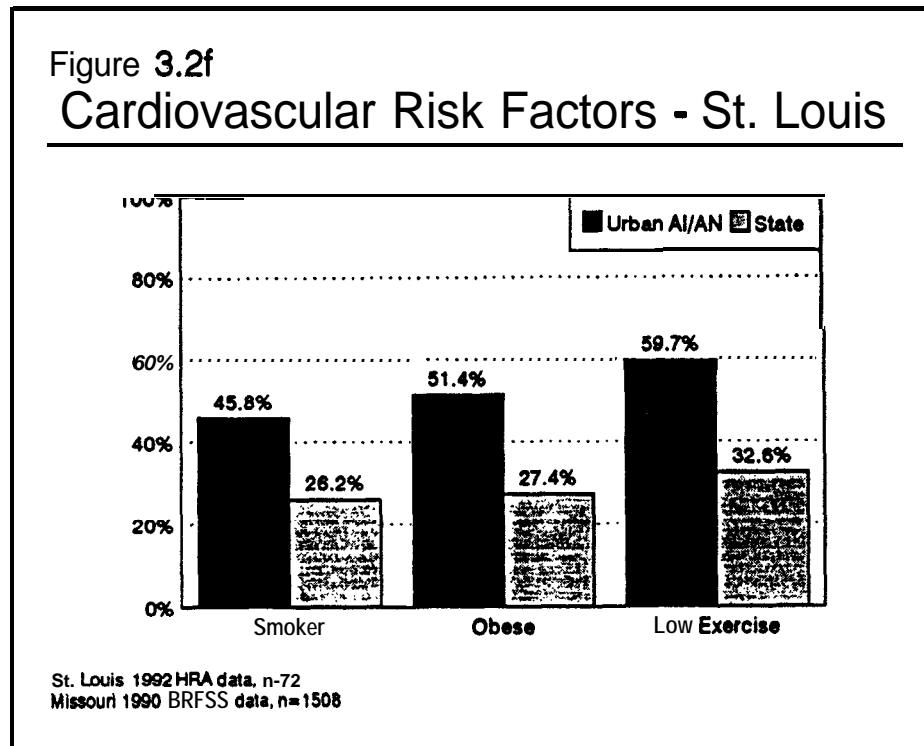
Figure 3.1f - Demographics of St. Louis Assessment participants			
*	Age	Median Range	38 18-71
*	Sex	Female Male	63.9% 36.1%
*	Employment	Unemployed Employed Student Retired Homemaker	16.6% 50.0% 13.9% 11.1% 0.3%
*	Education	Some High School High School Grad College Grad	13.9% 31.9% 11.1%
*	Ethnicity	Full-blood < Full-blood	18.1% 81.9%
*	Tribes (22 Total)	Cherokee Choctaw Otoe Other	25.0% 5.6% 5.6% 63.0%
Number Of Participants = 72			

The median age of St. Louis participants is 38, and 64 percent are women. Fifty percent of participants are employed either full or part time. Eleven percent are college graduates. Eighteen percent are full blood American Indian/Alaska Native. The three Tribes most often represented-Cherokee, Choctaw, and Otoe--comprise 36 percent of

the total St. Louis study population. In the 1989 study of St. Louis American Indians/Alaska Natives by Reidhead, the three Tribes most frequently represented include Cherokee (37 percent), Choctaw (10 percent), and Chippewa (8 percent).

Cardiovascular Risk Factors

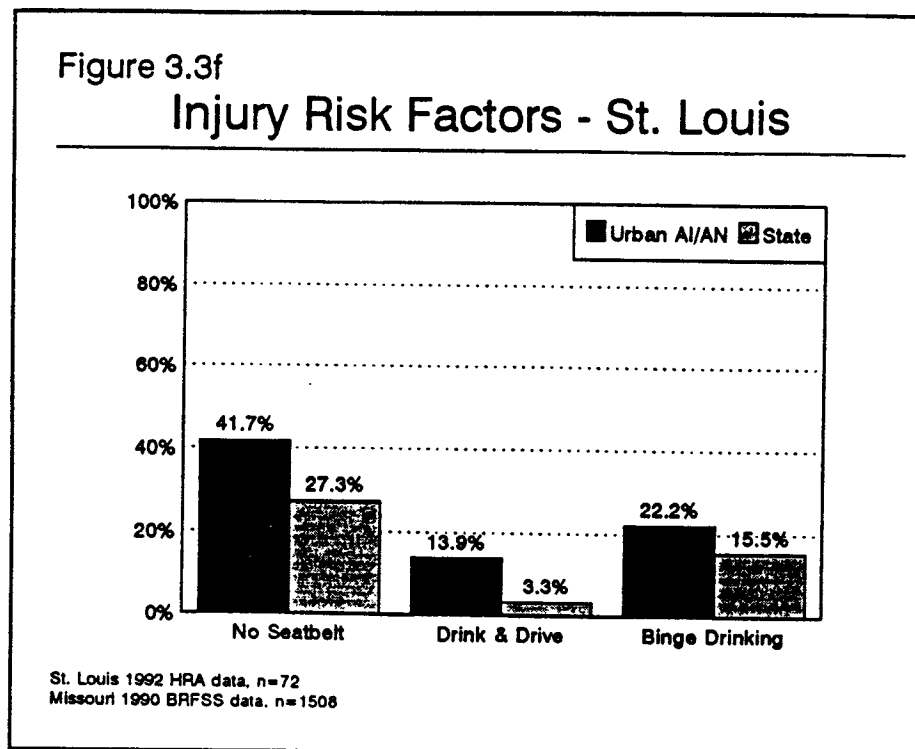
Figure 3.2f reflects the proportion of St. Louis assessment participants with selected cardiovascular risk factors compared to the Missouri state general population.



Smoking, obesity, and lack of exercise are all factors that contribute to the development of heart disease. All three of these risk factors are more prevalent among St. Louis assessment participants than among the Missouri general-population. In addition, 31 percent of St. Louis participants have a high blood pressure reading, twenty-four percent have a blood cholesterol of ≥ 240 mg/dL (high), and 23 percent have a blood cholesterol of 200-239 mg/dL (borderline high). For comparative purposes, the Year 2000 National Objectives for Health Promotion and Disease Prevention recommends that no more than 20 percent of all adults have blood cholesterol levels of 240 mg/dL or greater.

Injury Risk Factors

Figure 3.3f reflects the proportion of St. Louis assessment participants with selected injury risk factors compared to the Missouri general population.



St. Louis assessment participants are less likely to use seatbelts, four times more likely to drink and drive, and one and a half times more likely to binge drink than the Missouri state general population.

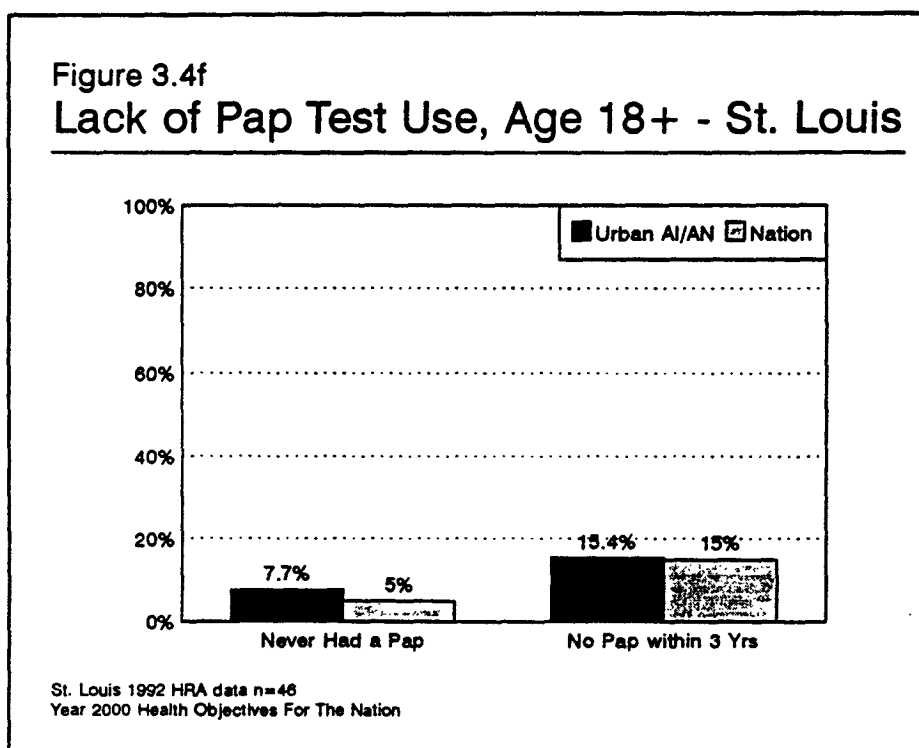
An additional risk factor for injury or death due to a motor vehicle accident is driving over the speed limit. Seventeen percent of St. Louis participants report driving between 6-10 miles per hour over the speed limit, while 8.3 percent typically drive at least 11 miles over the speed limit.

Diabetes

Fifteen percent of St. Louis assessment participants report they are diabetic, compared to a national estimate of five percent for the general population. Thirty-six percent have a family history of diabetes, and 20 percent have an elevated blood glucose (compared to 6.6 percent for the U.S. general population).

Women's Health

Figure 3.4f reflects lack of Pap test use among St. Louis women assessment participants age 18 and over.



Of the 72 participants, forty-six (64 percent) are women age 18 and over. Of these women, eight percent have never had a Pap test, and 15 percent have not had one within the last three years. When measured against the Year 2000 Health Objectives, these proportions indicate a fairly good use of Pap tests among St. Louis women participants.

The American Cancer Society recommends that women age 40 and older receive mammograms to screen for breast cancer every one to two years, then yearly beginning at age 50. Among St. Louis participants, 20 (28 percent) are women age 40 and older.

Of these, 25 percent have never received a mammogram, and 25 percent have had a mammogram, but not within the past three years.

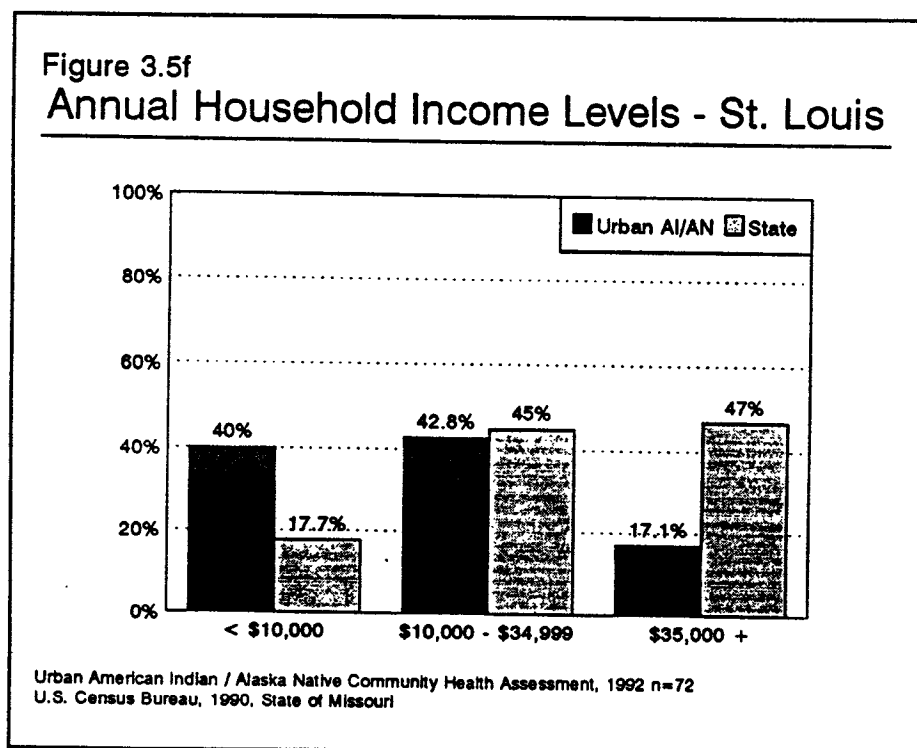
Men's Health

The American Cancer Society recommends yearly rectal exams for men age 40 and older as a screening for prostate cancer. Of St. Louis participants, 14 (19 percent) are men age 40 and older. Of these, 43 percent have had a rectal exam within the past year, 29 percent have had an exam but not within the past three years, and seven percent have never had a rectal exam.

Community Health Assessment

Income

Figure 3.5f reflects household income levels for St. Louis assessment participants compared to the general population of Missouri. Local income levels (MSA or county) for the general population were unavailable at the time of this report writing.

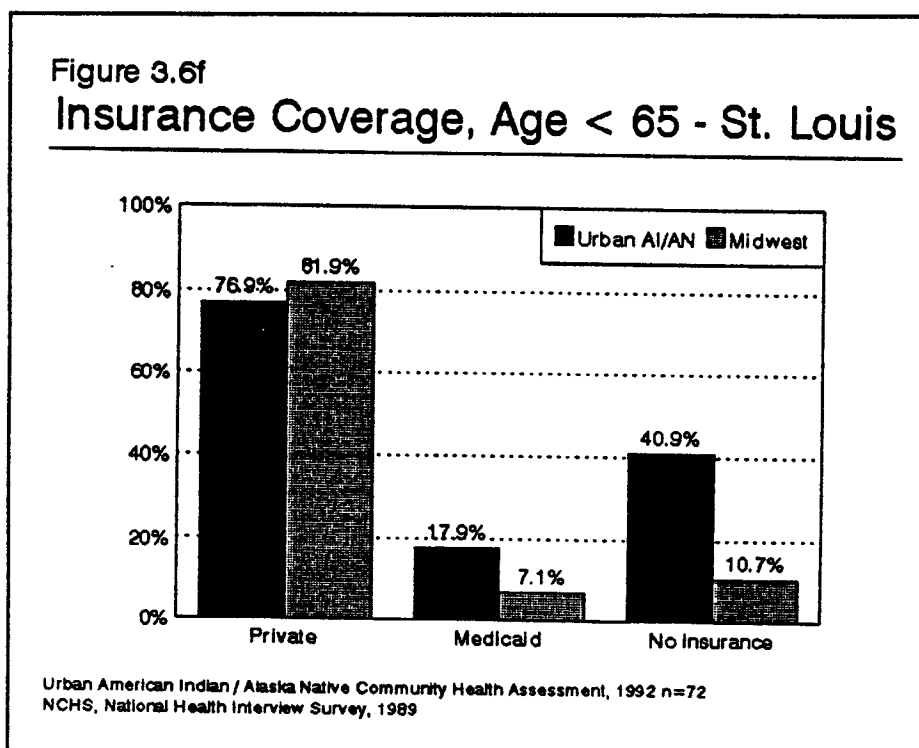


St. Louis assessment participants are twice as likely to earn less than \$10,000 a year than the Missouri general population, about as likely to earn in the middle ranges of \$10,000-\$34,999, and three times less likely to earn \$35,000 or more. In the 1989 study

by Reidhead, 42.9 percent of those interviewed earned less than \$10,000 a year, 45.5 percent earned between \$10,000 and \$34,999, and 11.6 percent earned \$35,000 and more. The median household income of St. Louis participants was \$13,889 compared to the median income of \$26,362 for residents statewide.

Health Insurance Coverage

Figure 3.6f reflects health insurance coverage among St. Louis assessment participants below age 65.



Comparative data from the National Health Interview Survey are grouped according to region--Northeast, Midwest, South, and West. St. Louis is in the Midwestern region.

St. Louis assessment participants are four times less likely than other midwesterners to have health insurance. Of those with health insurance, comparable percentages of St. Louis participants and the midwestern general population have private insurance coverage, while St. Louis participants are two and a half times more likely to have Medicaid coverage than the midwestern general population.

In the 1989 study by Reidhead, 38.2 percent of participants had no health insurance. This compares closely to the finding of 40.9 percent in the current project.

Six (8 percent) of all St. Louis assessment participants are age 65 or older. Of these, all have health insurance.

Types of Health Facilities Used

St. Louis assessment participants most often seek health care from a private physician (55.7 percent), neighborhood or family health center (15.7 percent), and school clinic (7.1 percent).

Leading Problems When Seeking Health Care

Leading problems experienced by St. Louis participants when seeking health care include: cost (56.9 percent); lack of health insurance (37.5 percent); lack of American Indian/Alaska Native health care providers (20.8 percent); not knowing what services are available (19.4 percent); distance needed to travel to visit physician (15.3 percent); and lack of trust in mainstream providers (15.3 percent).

SUMMARY OF ST. LOUIS FINDINGS

Health Status

Heart disease and stroke are the leading causes of death among St. Louis American Indians/Alaska Natives. No infant deaths were reported for the three years analyzed--1988-1990. A much lower proportion of American Indian/Alaska Native women in St. Louis than women in the St. Louis general population receive prenatal care in the first trimester (45 percent versus 63 percent). Low birth weight infants are born to St. Louis American Indian/Alaska Native women slightly less often than to women in the St. Louis general population.

Cardiovascular Health

Selected cardiovascular risk factors are more prevalent among St. Louis assessment participants than among the Missouri general population, including smoking, obesity, and lack of exercise. High blood pressure readings and high cholesterol levels, however, are less prevalent among participants in St. Louis than in the U.S. general population.

Injury Prevention

Selected injury risk factors are more prevalent among St. Louis assessment participants than among the Missouri general population. Lack of seatbelt use, drinking and driving, and binge drinking are all higher among St. Louis participants than among the Missouri general population.

Diabetes Prevalence and Risk Factors

Fifteen percent of St. Louis assessment participants report being diabetic, which is three times that of the estimated five percent in the U.S. general population. Elevated random glucose levels (≥ 115 mg/dL) were found among 20 percent of participants, three times the estimated 6.6 percent in the U.S. general population. And, 36 percent of all St. Louis participants report a family history (parent or sibling) of diabetes.

Women's Health

Women assessment participants in St. Louis come close, but do not meet the Year 2000 National Health Objective for having ever had a Pap test, with 92 percent screened compared to the recommended level of 95 percent. They meet the National Health Objective of 85 percent for having had a Pap test within the past three years.

St. Louis women participants age 40 and older come close to meeting the Year 2000 National Health Objective for mammogram screening, with 76 percent reporting having had a mammogram at least once.

Men's Health

Forty-three percent of men assessment participants in St. Louis report having had a rectal exam within the past year. As with all study sites, the proportion of screening in St. Louis falls short of American Cancer Society recommendations for yearly prostate cancer screening exams for all men age 40 and over.

Barriers to Care

Income

St. Louis assessment participants are twice as likely as the Missouri general population to earn annual household incomes of less than \$10,000, and a third as likely to earn household incomes of \$35,000 and more. Median household income among St. Louis participants was \$13,889, compared to the Missouri state median income for the general population of \$26,362.

Health Insurance Coverage

St. Louis assessment participants are four times more likely than the general population in the Midwest to lack health insurance.

SECTION 4

CONCLUSIONS AND RECOMMENDATIONS

Health Care Utilization

Ambulatory health care services are provided to St. Louis residents through the St. Louis Regional Medical Center and Ambulatory Care Centers. No information is gathered on the use of these services by American Indians/Alaska Natives. Grace Hill Neighborhood Health Center, a local community health center, makes an effort to reach out to the St. Louis American Indian/Alaska Native community, documenting 386 users in 1991.

The most commonly mentioned sources of health care among St. Louis assessment participants are a private physician, neighborhood or family health center, and school clinic.

CONCLUSIONS

Few studies have been conducted on the health status and health needs of urban American Indians/Alaska Natives. As far as is known, no previous studies have been done to determine the health status and health needs of urban American Indians/Alaska Natives in the six cities included in this project. Because of the lack of previous investigations, information obtained during the course of this project will be useful in any future research or attempts to determine the health needs of urban American Indians/Alaska Natives, in these cities and in other urban areas across the country.

In using the analysis of this project's findings for service delivery, policy making, or other purposes, however, the following study limitations need to be considered. First, because of reporting errors at city, county, and state levels for selected health indicator data in their appropriate racial categories, American Indian/Alaska Native mortality and morbidity statistics often are inaccurate, and usually under reported. Because the American Indian/Alaska Native population in the U.S. is small (1.9 million, according to the 1990 U.S. Census Bureau) when compared to that of other racial and ethnic groups, additional error in under reporting further decreases the accuracy of mortality and morbidity statistics for the American Indian/Alaska Native population on local, state, and national levels.

Second, primary data collected through the Health Risk Appraisals and Community Health Assessments are not necessarily representative of the American Indian/Alaska Native population community-wide. This is because the project participants were self-selected, and therefore constitute a convenience sample. Because of logistical concerns, no attempt was made to obtain a random sample of the American Indian/Alaska Native population in each of the six study sites. And, random sampling is considered a necessary component for ensuring a representative sample. It could be argued, however, that project participants may represent potential urban Indian health program users and/or those most in need of health services.

Third, even with aggressive advertising and recruitment efforts, participation rates were lower than expected in four of the six sites. Low participation rates decrease the ability to generalize the study's findings to all American Indian/Alaska Native residents of the community.

In spite of these limitations, conclusions can be drawn about the health status and health needs of assessment participants, as well as the American Indian/Alaska Native population in each of the six communities.

Health Status

Infant Mortality

In the three study sites where American Indian/Alaska Native infant deaths were identified--Kansas City, Washington, D.C., and Anaheim--infant mortality rates were three to four times greater over a three year period than those for the general population in each of the locations. However, because numbers of American Indian/Alaska infant deaths in all the sites were so few, the rates are unstable, and significant conclusions cannot be drawn. To improve the accuracy of data, any future analysis of American Indian/Alaska Native mortality rates (infant and other) for specific U.S. cities should include death certificate data analysis for five years.

The Texas state Health Department did not report any American Indian/Alaska Native infant deaths for years 1988-1990 for the entire state. Missouri health officials also did not report any American Indian/Alaska Native infant deaths for the city of St. Louis during the same time period. It is more likely that these data are due to problems with under reporting than a reflection of reality.

The percentage of American Indian/Alaska Native women who receive prenatal care in the first trimester is lower in Kansas City, Washington, D.C., and St. Louis when compared to women in the general population in those sites. In Anaheim, Houston, and San Antonio, the proportion of women receiving early prenatal care is comparable to that in the general population. Of all six sites, only Washington, D.C. (Northern Virginia) reports a higher proportion of low birth weight infants (≤ 2500 grams) among American Indian/Alaska Native residents than among the general population.

Selected Risk Factors

The leading causes of death for urban American Indians/Alaska Natives are heart disease, cancer, accidents, cirrhosis, stroke, homicide, and diabetes. Factors that lead to these conditions or events often are complex and involve behavioral and lifestyle factors. For each of these causes of death, certain risk factors have been identified that, if modified in a positive way, would decrease the mortality rates specific to those causes.

Cardiovascular Health

Heart disease is the leading cause of death among urban American Indians/Alaska Natives. Selected cardiovascular risk factors are more prevalent among assessment participants than among the U.S. general population, including smoking, obesity, and lack of exercise.

Injury

Accidents are the third leading cause of death for urban American Indians/Alaska Natives, and deaths due to motor vehicle accidents comprise a significant proportion of accidental deaths overall. Selected injury risk factors are higher among assessment participants than among the U.S. general population, including lack of seatbelt use, drinking and driving, and binge drinking.

Diabetes (Prevalence and Risk Factors)

Twelve percent of assessment participants report they are diabetic, which is more than twice that found in the U.S. general population (5 percent). Elevated random glucose levels (≥ 115 mg/dL) were found among 20 percent of assessment participants, almost three times that found in the U.S. general population (6.6 percent). And, 46 percent of all assessment participants report a family history (parent or sibling) of diabetes.

Diabetes is a chronic illness that if uncontrolled, can result in problems with multiple body systems, including decreased visual acuity, poor circulation of the blood to the extremities, and neurological impairment. These complications require significant amounts of medical attention and result in increased medical expense and personal suffering. Prevention, screening, and early intervention would lessen the amount of medical complications due to diabetes.

Women's Health

Women assessment participants meet the Year 2000 National Health Objective for Pap test use (95 percent), and come close to meeting the Health Objective for having had a Pap test within the past three years (83 percent versus the recommended screening level of 85 percent).

Women assessment participants age 40 and older meet the Year 2000 National Health Objectives for mammogram screening. Eighty percent of women assessment participants age 40 and older have had a mammogram at least once, which is the level recommended by the Year 2000 National Health Objectives.

Men's Health

Men typically use health services less often than women. Certain indicators, however, suggest that efforts should be made to improve utilization of health care services by men. For example, the odds of having a high blood pressure reading is three times greater for men assessment participants than for women. And, men assessment participants are less likely to get yearly cancer screening exams, with only 25 percent

of all men assessment participants reporting they received a rectal exam within the past year.

Barriers to Care

Income

Assessment participants are three times more likely than the U.S. general population to earn annual household incomes of less than \$10,000. Median household income among assessment participants was \$18,465, compared to the median household income for the general population of \$29,943.

Health Insurance Coverage

Assessment participants are almost two times more likely than the U.S. general population to lack health insurance. Women participants are twice as likely as men to have health insurance coverage.

Health Care Utilization

The most commonly reported source of health care among project participants is a private physician, followed by an Indian Health Service clinic, and a neighborhood or family health center.

Assessment participants visit their doctors less often than the U.S. general population. Lower incomes and less health insurance coverage among assessment participants most likely account for at least part of these lower utilization rates.

Because American Indians/Alaska Natives comprise a small percentage of the overall U.S. population when compared to other ethnic and racial groups, city health departments often do not pay attention to their particular health needs. This is apparent in the exclusion on most public health department and community health center clinic registration forms of "American Indian/Alaska Native" as a category of service recipients. The lack of data that are collected and extracted on American Indians/Alaska Natives for analysis by health departments is another indication of this exclusion. While not universal among all six sites, this lack of attention to health statistics for American Indian/Alaska Native residents was the rule rather than the exception.

There is also misunderstanding among some health officials about the role of the federal government in providing health care to American Indians/Alaska Natives who no longer live on reservations. Health officials often believe that urban American Indian/Alaska Native residents have unrestricted access to Indian Health Service or Tribal clinics if they

choose to use them. In reality, the nearest IHS or Tribal health facility may be of limited use because of certain clinic policies or logistical considerations.

One example of this is the Haskell Institute in Lawrence, Kansas, a major source of health care for Kansas City American Indian/Alaska Native residents even though the school is 45 miles from Kansas City. One study participant stated, and others confirmed that access to health services at Haskell is limited at certain times of the year because the clinic's first priority is to provide health care to its students. When students require a lot of health services, i.e. at the beginning of the school year, appointments with health providers are limited.

Another issue discussed during meetings with health department officials was the perception among some that, like other racial and ethnic minorities, American Indians/Alaska Natives have access to publicly supported services. Service utilization statistics, however, indicate that in some sites with significant numbers of American Indian/Alaska Native residents, few health department users identify themselves as American Indian/Alaska Native. The conclusion health officials often draw is that there is no need for such services among the city's American Indian/Alaska Native population. A more in-depth examination of why publicly supported services often are not used by American Indians/Alaska Natives is rarely (if ever) undertaken.

The Next Step

Results of this study suggest several areas for improvement in decreasing mortality and associated morbidity among urban American Indians/Alaska Natives in the six study sites. The leading causes of death are all associated with behavioral risk factors that, if modified, would decrease mortality rates for each of the causes. In addition, problems with access to health care services are significant for urban American Indians/Alaska Natives. For various reasons, American Indians/Alaska Natives in the city do not typically use local health clinics. Private physicians are the most common source of health care among assessment participants, but because of low incomes and a high percentage of urban American Indian/Alaska Native residents without health insurance, health care utilization is less than that of the general population.

The purpose of this study was to assess the health status and health needs of American Indians/Alaska Natives in the six chosen study sites. Establishing urban Indian health programs is a positive first step in addressing the health care needs of urban American Indian/Alaska Native residents in these cities. In order for this to happen, additional health needs assessments need to be conducted at the local levels by American Indian/Alaska Native organizations, in accordance with Section 504 of Title V of the Indian Health Care Improvement Act (as amended). More specific information on the tasks required to conduct these assessments are outlined further in the Recommendations section below.

RECOMMENDATIONS

Study findings prompt recommendations in two areas: steps needed for local American Indian/Alaska Native organizations to pursue Title V funding through the Indian Health Care Improvement Act for additional urban Indian health programs; and those related to the need for increased recognition by health officials at all levels of the health needs of American Indian/Alaska Native residents of urban communities.

Recommendations for Pursuit of Title V Funding

Title V, Section 504, of the Indian Health Care Improvement Act authorizes the Indian Health Service to contract with urban Indian organizations to conduct health needs assessments of the American Indian/Alaska Native populations in cities currently without urban Indian health programs. In order to accomplish this,

1. Health needs assessments should be conducted in all potential sites using standard guidelines and assessment tools.
2. Health needs assessments must be conducted in accordance with Title V, Section 503 (b) of the Indian Health Care Improvement Act to include:
 - * an assessment of the size of the urban Indian population in the urban centers involved;
 - * accessibility and utilization of existing health care services by urban American Indian/Alaska Natives;
 - * the extent to which an urban Indian health program would duplicate services already provided; and
 - * the extent to which existing health agencies would participate in providing health care services.
3. To accomplish the above one year contracts for \$25,000-\$50,000 per location are needed.
4. The Year 2000 Health Promotion and Disease Prevention Objectives should serve as guidelines to obtain baseline data, so as to develop appropriate health objectives and health services for the urban Indian health programs.
5. Criteria are needed for ranking the need among the study sites for funding, in light of limited funding.
6. Technical assistance should be made available to those who receive contracts to conduct the health needs assessments.

7. Technical assistance should be made available to those who receive contracts to assist with coalition building. Building coalitions with governing bodies, health departments and other health agencies, American Indian/Alaska Native organizations, and other interested groups will establish a basic foundation for the organization and planning required to determine the health care needs of a community, and then to implement strategies to address those needs.
8. Adequate technical assistance and training should be provided to those who receive contracts in the areas of contract and grant compliance, and program management. Most community organizations have little experience in the operation of health programs, so additional training and technical assistance would help ensure success.
9. Allocate Section 504 funds for health needs assessments according to the demonstrated health needs of the communities, not according to a perceived need to equalize funding among Indian Health Service Regional Areas.
10. In addition to the six cities included in this health needs assessment, there are other U.S. cities with significant numbers of American Indian/Alaska Native residents. An evaluation of the health status and needs of American Indian/Alaska Native people in these additional cities should also be completed. One study, in particular, should include urban areas that may have nearby Indian health facilities (within 30 miles), where persons in the urban areas still have difficulty obtaining access to health care. Suggested sites include Duluth (MN), Las Vegas (NV), Buffalo (NY), Rapid City (SD), Anchorage (AK), and Syracuse (NY).
11. Analyze mortality data for at least a five year period when conducting any future health needs assessments of American Indians/Alaska Natives living in urban areas.

Increased Awareness of American Indian/Alaska Native Health Needs

12. Increase awareness on the part of city, county, and state health officials of the need to improve the accuracy of mortality and morbidity statistics for American Indians/Alaska Natives living in urban areas. Indian Health Service Urban Area Coordinators are in strategic positions to provide the type of education and follow through required to work with selected health officials at all three levels to improve the accuracy of morbidity and mortality data for urban American Indians/Alaska Natives.
13. Increase awareness on the part of health department and community health center administrators of the need for health services among their community's American Indian/Alaska Native population. Health departments and community

American Indian/Alaska Native population. Health departments and community health centers often provide culturally sensitive health care to ethnic groups who have immigrated to the U.S. from a multitude of countries, but fail to do the same for indigenous people of the U.S. Implementing an educational program, perhaps in conjunction with coalition building, would be helpful in providing information on the American Indian/Alaska Native communities within the cities.

SECTION 5

REFERENCES

REFERENCES

- ADA Reports (1989). Position of the American Dietetic Association: Optimal weight as a health promotion strategy. Journal of the American Dietetic Association, 89 (12), 1814-1817.
- Adams, P.F. and Benson, V. (1990). Vital and Health Statistics: Current Estimates from the National Health Interview Survey, 1989. National Center for Health Statistics. U.S. Department of Health and Human Services, 10 (176), Hyattsville, Maryland.
- Bush, Mitchell (1991). Personal communication. American Indian Society of Washington, D.C.
- Eagle/Walking Turtle (1991). Indian America. John Muir Publications, Santa Fe, New Mexico.
- Ebberle, George (1992). Personal communication. Grace Hill Neighborhood Health Center, St. Louis, Missouri.
- Glendinning, Sara (May, 1992). Personal communication. Department of Human Services, Research and Statistics Division, Washington, D.C.
- Indian Health Service (November, 1991). Report to Congress on the Indian Health Service with Regard to Health Status and Health Care Needs of American Indians in California. In response to Public Law 100-713 (Section 709). Rockville, Maryland.
- Lando, H., et al. (May-June, 1992). Urban Indians' smoking patterns and interest in quitting. Public Health Reports, 107 (3), 340-344.
- McNamara, Chris (July, 1992). Personal communication. American Diabetes Association, National Center, Alexandria, Virginia.
- May, Philip A. (1987). Suicide and self-destruction among American Indian youths. American Indian and Alaska Native Mental Health Research, 1 (1), 52-69.
- National Center for Health Statistics (1991). Health, United States, 1990. Public Health Service, Hyattsville, Maryland.
- O'Brien, Marilyn, et al. (1991). Urban Indian Health Comparative Analysis Report. American Indian Health Care Association, unpublished.
- Prucha, F.P. (1984). The Great Father. University of Nebraska Press, Lincoln, Nebraska, 1079-1081.

Reidhead, Van A. (1992). Personal communication. Department of Anthropology, University of Missouri-St. Louis, St. Louis, Missouri.

Reidhead, Van A. (1990). Urban Indians in the St. Louis Area and the Census. A Statistical and Ethnographic Report of Investigations Following the 1988 Dress Rehearsal Census. Department of Anthropology, University of Missouri-St. Louis, St. Louis, Missouri.

Shapiro, S., et al. (1980). Relevance of correlates of infant deaths for significant morbidity at one year of age. American Journal of Obstetrics and Gynecology, 136 (3), 363-373.

Siegel, Paul Z., et al. (1991). Behavioral risk factor surveillance, 1986-1990. Morbidity and Mortality Weekly Report, 40 (SS-4), 1-23.

Sugarman, J.R., et al. (October, 1988). Coding of race on death certificates of patients of an urban Indian health clinic, Washington, 1973-1988. The Provider, 113-115.

Terrell, John Upton (1970). American Indian Almanac. Fitzhenry & Whiteside Limited, Toronto.

U.S. Bureau of the Census (1992). Census of Population and Housing, 1990: Summary Tape File 1.

U.S. Department of Agriculture (1990). Nutrition and Your Health: Dietary Guidelines for Americans. U.S. Department of Health and Human Services, 3rd edition, U.S. Government Printing Office, Washington, D.C.

Vasquez y Sanchez, Ramon (1992). Personal communication. Centro Cultural Aztlan, San Antonio, Texas.

Voelker, Evelyn (1992). Personal communication. American Indian Center of Mid-America, Inc., St. Louis, Missouri.

SECTION 6

APPENDICES

APPENDIX A

AMERICAN INDIAN/ALASKA NATIVE CENTERS PARTICIPATING IN PROJECT

Kansas City, Missouri

The Heart of America Indian Center, Inc.

The Heart of America Indian Center, Inc., was incorporated in 1971 to serve American Indian/Alaska Natives in the Kansas City area. Originally organized by the Kansas City Indian Club, a social group, to provide needed services to American Indian/Alaska Natives, the Center today accomplishes this task through the following program areas:

1. Community Services (emergency food, shelter, utility payment assistance; and commodity foods distribution);
2. Indian Children Services (legal advocacy, counseling, community education, foster care, summer youth program, and Tribal enrollment assistance);
3. Employment and Training;
4. Morning Star Outreach Program (an alcohol prevention program); and
5. Cultural Activities (an annual PowWow; dinners and dances; and participation in non-American Indian/Alaska Native ethnic celebrations and events.

Anaheim, California

Southern California Indian Center, Inc.

The Southern California Indian Center, Inc., provided direct service to 10,000 persons over the past year. The components of service fall into seven major areas:

1. employment and training;
2. Indian Child and Family Services;
3. education (tutoring children in grades K-12);
4. senior program;
5. social services;
6. tobacco control;
7. and cultural education (PowWows, demonstrations, community involvement).

The Center has had a long standing interest in providing health care services to community members, and at times over the past few years, has worked in collaboration with the American Indian Free Clinic, thirty miles north in Bellflower, Los Angeles County, to provide satellite services at the Garden Grove Center.

St. Louis, Missouri

The American Indian Center of Mid-America, Inc.

The American Indian Center of Mid-America, Inc. was chartered in 1974 by leaders of the St. Louis American Indian/Alaska Native community to serve the needs of American Indian/Alaska Natives living in the Missouri and Illinois counties that make up greater St. Louis. The Center provides services in a wide range of program areas, including:

- emergency assistance (food, clothing, shelter, medical care, transportation, legal advocacy, and job placement);
- child and family services;
- promotion of American Indian/Alaska Native arts;
- traditional cultural events; and
- education programs about American Indian/Alaska Native cultures and values for students in the St. Louis area public schools.

The Center provided service to 2,341 persons during its October 1, 1990 to September 30, 1991 Fiscal Year.

APPENDIX B

REVIEW OF RELEVANT LITERATURE ON HEALTH OF URBAN AMERICAN INDIAN/ALASKA NATIVES

1. **American Indian Health Care Association (April, 1991). Direct health care services for urban Indians. St. Paul, Minnesota.**

This report provides information pertinent to the efficient management of urban Indian health care programs. This report addresses the following questions:

- * How many American Indian/Alaska Natives are served by each urban Indian health program?
- * What are the unmet health needs of the urban Indian community each program serves?
- * How accessible are non-Indian health programs to the American Indian/Alaska Native population in each community?
- * Do any urban Indian health services duplicate other private or public health services in the area?
- * Can any Indian health programs be eliminated because utilization doesn't support the need for IHS services?
- * Why aren't Indian health projects reporting regularly regarding gaps between health needs?

A summary of significant conclusions includes:

1. Many urban Indian health programs need substantial increases in their revenues in order to fully serve urban American Indian/Alaska Native communities.
 2. In order to improve utilization rates, minimum expectation need to be communicated and standards need to be developed regarding basic services to be offered.
 3. A lack of regular reporting seems to be at the heart of some of the problems addressed in this report. Improved, required reporting would help to prevent duplication of services within any given community.
2. **American Indian Health Care Association (February, 1991). Potential sites: urban centers unserved by an urban Indian health program. St. Paul, Minnesota.**

This report identifies 19 cities, based on selected criteria, in which urban Indian health programs could be located. Since 1978, when 41 programs operational, no new programs have been funded; in fact, six programs have closed, for a variety of reasons. However, new programs may be funded by the Indian Health Service if unmet health needs among urban Indians are identified.

Federal regulations set the criteria for the selection of additional sites. These criteria include:

- * a significant American Indian/Alaska Native population;
- * no alternative source of health care specifically for American Indian/Alaska Natives;
- * high need, as indicated by percentage of American Indian/Alaska Natives below 200 percent poverty level;
- * high mortality rates from preventable causes;
- * a substantial population of potential users; and
- * demonstrated community support.

The report also supplies preliminary estimates on the cost of establishing new urban Indian health programs in each of the 19 sites, and makes recommendations regarding the next steps in the selection process.

3. American Indian Health Care Association (February, 1991). Urban Indian health comparative analysis report. St. Paul, Minnesota.

This report compares the major health problems of American Indian/Alaska Natives living in urban areas with those of reservation based American Indian/Alaska Natives, as well as to the general U.S. population. This comprehensive analysis includes such health indicators as: trends in mortality and morbidity; utilization, costs and admittance rates to health care facilities; and an assessment of the availability and accessibility of health care.

Indian Health Service (IHS) publishes yearly data on the health status of American Indian/Alaska Natives living in the 33 reservation states. These data, however, do not account for the over 50 percent of all American Indian/Alaska Natives who live in urban areas. This report examines the mortality and morbidity, costs, and availability of services for urban American Indian/Alaska Natives who reside in the 34 cities that have an urban Indian health program, and compares the findings to data for IHS service populations and all-race population.

Significant findings include:

1. Heart disease, cancer, cirrhosis and accidents comprise the most frequent causes of death in urban American Indian/Alaska Natives. Heart disease, cancer, and suicide death rates rose between 1979-1987.
 2. Cause-specific mortality rates were lower in urban American Indian/Alaska Natives than the U.S. general population in all categories except accidents, cirrhosis and homicide. Mortality rates for AI/AN were lower in all categories except cirrhosis and homicide in urban populations than in those living in IHS service areas.
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3. Urban Indian men were over represented in 4 out of the 5 leading causes of death. The largest difference between male and female death rates was in homicide, where males died at 3.4 times the rate of females.
4. Throughout 1980-1990, client workloads increased in IHS/Tribal facilities, while urban programs maintained the same level of service provision. This was most likely due to limitations in IHS appropriations for urban Indian health programs, which increased by only 1.5 percent during this period.
5. Costs per urban Indian medical user were low compared to U.S. national per capita expenditures, which may indicate insufficient funding to provide the level of services needed by the urban Indian population.
6. According to CPT procedural code data for urban Indian health programs, maternal and child health services constituted the majority of encounters.
7. The largest population subgroup among Indians in the 34 cities with IHS-funded urban Indian health programs were youths age 15-24.
8. Service users within urban programs included nearly all those in the population under 5 and those between 25-34. The groups with the fewest provider-user interactions were children and youth 5-24, and urban Indians older than 35.
9. Most of the patients reported a high level of satisfaction with services offered by the urban Indian health programs, but noted that inadequate staffing resulted in long waiting times and poor quality of interactions with providers.

Based on the complete analysis, several recommendations are offered. Most have to do with increasing appropriations for urban Indian health programs, expansion of existing services, addition of new services and programs, and continued epidemiological study of major health problems in urban American Indian/Alaska Natives.

4. American Indian Health Care Association (1991). Urban national plan to meet the year 2000 objectives. St. Paul, Minnesota.

This report examines mortality, morbidity, and selected health risk behaviors among American Indian/Alaska Natives living in urban areas currently served by urban Indian health programs. The report first describes the health status of Urban American Indian/Alaska Natives, outlines currently available preventive services, and then provides a discussion of priorities identified by urban Indian health program directors. Target health objectives are described with an analysis of service, personnel and costs attached to achieving those health targets by the Year 2000.

5. **American Indian Health Care Association (1990). Healthy traditions: the Health Risk Appraisal Project for urban American Indians. St. Paul, Minnesota.**

This report is a description of the American Indian Health Care Association's "Healthy Traditions" project, an ongoing study of the behavioral health needs of urban American Indian/Alaska Natives. Study participants number 1,188, ranging in age from 18-86. The project incorporates the use of the Health Risk Appraisal (HRA) to assess an individual's health status according to selected health behaviors and physiological indicators.

The report includes findings on the following: cardiovascular risk factors (smoking, overweight, lack of exercise, cholesterol levels, blood pressure); diabetes risk factors (family history, glucose, smoking, overweight, lack of exercise); injury risk factors (alcohol use, seatbelt use, maintaining a safe driving speed); behavioral health risks (teenage pregnancy, suicidal ideations); and preventive health behaviors (obtaining Pap tests, mammograms, self breast exam, MD exam, rectal exam).

The report does not draw any conclusions or make recommendations based on the study's findings. It does state, however, that further analysis will be completed as additional data are added from the ongoing HRAs.

6. **American Indian Health Care Association (September, 1989). Barriers to mainstream health care experienced by urban American Indians. St. Paul, Minnesota.**

This report reviews a variety of sources that examine the barriers to health care facing American Indian/Alaska Natives who live in urban areas. The framework used in this review examines three major types of health care barriers: physical/geographic (convenience, travel time, appointment lag time, waiting time, telephone availability, mode of transportation, mobility, hours of service, child care); financial/economic (patient health insurance coverage--private and public, malpractice insurance rates, emergency room use); and cultural/structural (discrimination, lack of knowledge and sensitivity about Indian culture, lack of American Indian/Alaska Native health professionals to provide care, inadequate outreach, a cumbersome Medical assistance application process, misperception on the part of health professionals on the extent to which Indian health care is provided by Indian Health Service).

The major findings of this report include the following:

1. The major barrier to quality health care in the mainstream setting is cultural. The lack of culturally appropriate health care services and few American Indian/Alaska Native health care providers contribute to low use
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of health care services by American Indian/Alaska Native people in the urban areas.

2. For a variety of reasons, some cultural, many American Indian/Alaska Native patients do not complete the process of application for health coverage under state Medicaid programs.
3. American Indian/Alaska Natives living in urban areas often have to wait several weeks for an appointment to see their health care provider.
4. Relatively few American Indian/Alaska Native health professionals are available to provide health care to their people.
5. Many American Indian/Alaska Natives who work in urban settings are employed at or below minimum wage, have no health insurance coverage, and do not qualify for medical assistance. This group of "working poor" are especially vulnerable to the financial ramifications of illness.

7. American Indian Health Care Association (1989). Evaluation of potential site locations for new urban Indian health programs. St. Paul, Minnesota.

This report, completed in September of 1989, precedes the February, 1991 report reviewed above-- "Potential Sites: Urban Centers Unserved by an Urban Indian Health Program." This 1989 report evaluates potential site locations for new urban Indian health care programs based on three criteria: Native population within a given "urbanized area"; the percentage of American Indian/Alaska Natives living below 200 percent of poverty level; and city-specific mortality rates for American Indian/Alaska Natives living in those urban areas.

This study recommends the following:

- * Congress appropriate sufficient funds to conduct health needs assessments in urban areas with significant numbers of American Indian/Alaska Natives currently unserved by an urban Indian health program;
- * 5-10 locations be funded over the next two years; and
- * standardized guidelines to be developed and followed in the conduct of the feasibility studies so as to ensure uniformity and comparability of data received.

8. American Indian Health Care Association (February, 1984). Evaluation of potential locations for new urban Indian health programs. St. Paul, Minnesota.

This report precedes the 1989 report reviewed above--"Evaluation of Potential Site Locations for New Urban Indian Health Programs". It was the first analysis by the American Indian Health Care Association of potential sites for new urban Indian health programs.

Using 1980 census data, this analysis rank orders 18 Standard Metropolitan Statistical Areas (SMSAs) according to population of American Indian/Alaska Natives, and examines the proximity of the nearest health facility that provides health care specifically to American Indian/Alaska Natives.

Specific recommendations are made regarding the methodology used to establish new urban Indian health programs, as well as to allocate available monetary resources.

9. **Beauregard, K., Cunningham, P., and Cornelius, L. (July, 1991). Access to health care: findings from the survey of American Indians and Alaska Natives (AHCPR Pub. No. 91-0028). National Medical Expenditure Survey Research Findings 9, Agency for Health Care Policy and Research. Public Health Service, Rockville, Maryland.**

This paper presents estimates from the Survey of American Indian and Alaska Native (SAIAN) component of the 1987 National Medical Expenditure Survey (NMES) to examine the access to health care of American Indian/Alaska Natives living on or near reservations or in Alaska and eligible for services provided or supported by the Indian Health Service (IHS).

10. **Indian Health Service (July 18 and 19, 1990). Urban Health Round Table Report: Consensus Statement, IHS Round Table Meeting. Indian Health Service, Rockville, Maryland.**

The Indian Health Service (IHS), Office of Planning, Evaluation and legislation (OPEL) sponsored the Urban Round Table Meeting at IHS Headquarters in Rockville, Maryland on July 18 and 19, 1990. The purpose of the meeting was to bring together experts in health care, urban Indian community development, academia and national health policy to examine important, topical and controversial issues related to urban Indian health. In a round table setting, experts were provided with the latest, pertinent information on each issue. The group discussed each issue, and formulated recommendations, strategies, plans and a "consensus statement".

The status of urban Indian health care in currently unserved urban sites was one of seven major issues on which a consensus statement was issued. This statement reads as follows:

"Many urban Indian populations in need of health care remain unfunded by the IHS urban program. There is a need for centers to be started in these areas. The number of urban centers funded by IHS has been reduced from 41 to 34. Although legislative authority exists for 'New Starts', none have been funded under this mechanism. It was the consensus of the urban round table that:

- a. Increased urban funding should be provided for new starts to avoid a negative impact on existing programs.
- b. IHS needs to request an enhancement to urban health funding in its FY 93 Budget Process and efforts by IHS and urban programs should be targeted at developing the justification for this need. This should include efforts at the tribal consultation meetings.
- c. Feasibility studies (which include Needs Assessments) should be funded and conducted in urban communities demonstrating need and interest.
- d. The round table supports the recommendations of the American Indian Health Care Association study on unserved cities."

11. Indian Health Service (1989). An assessment of the health needs of the urban Indian population in the state of Arizona. Rockville, Maryland.

This report, commissioned by the Indian Health Service and completed by the American Indian Health Care Association, is an in depth analysis of the health status of the Arizona urban Indian population. Specific questions addressed in this report include:

- 1. What are the demographic profiles of American Indians in selected urban sites in Arizona?
- 2. What is the present health status of urban Indians and how does it compare to the health status of urban non-Indians in Arizona, as well as to the general population of Indians and non-Indians in the U.S.?
- 3. What, if any, health resources are available to Indian people in the urban setting?
- 4. What are the health needs of the urban Indian population?
- 5. What are recommendations for action and future research?

The study's findings indicate that urban Indians in Arizona have many health needs and face significant barriers to care. Policy recommendations include:

- 1. Establish a Medicaid education program.
- 2. Promote coalition efforts between Tribal, IHS, State, County, and private agencies.
- 3. Address Arizona as a contract care state.
- 4. Clarify the role of the Phoenix Indian Medical Center.
- 5. Explore the feasibility of shared service between urban health care delivery programs and local service units.
- 6. Establish full-time urban Indian positions at the state and Federal levels.

12. Indian Health Service (1989). Indian Health Service urban Indian health program: background, assessment, recommendations and action plan. Indian Health Service, Rockville, Maryland.

This report provides information on the health status, demographics, and health services provided for the various urban communities receiving Indian health Service funds. Also included are: an assessment of resource availability; barriers to access; service provisions in IHS funded programs, and the monitoring/oversight activities appropriate for IHS.

13. **Indian Health Care Improvement Act, Public Law 94-437, approved September 30, 1976; 25 U.S.C. 1601 et seq.**

The Indian Health Care Improvement Act of 1976, along with the Snyder Act of 1921, provides the principal statutory foundation for urban Indian health programs. The Snyder Act broadly commits the Federal Government to be responsible for the "benefit, care and assistance of Indians throughout the United States . . . for the relief of distress and conservation of health". The Indian health Care Improvement Act includes an additional goal--"to raise Indian health status to the highest level possible", and to "provide for the unmet health needs of both reservation and urban Indians."

Under Title V of The Indian Health Care Improvement Act, urban Indian health programs are required to:

1. Document needs;
2. Provide information and referral;
3. Provide services; and
4. Make recommendations to the Secretary of the Department of Health and Human Services, and other Federal, State, and local resource agencies on methods of improving health service programs to meet the needs of urban Indians.

In addition, the Indian Health Care Improvement Act specifies the criteria for award and/or renewal of contracts to urban Indian health programs, requires the Indian Health Service to develop procedures to evaluate contract compliance and performance of urban Indian health programs, requires that the IHS submit reports to Congress on urban Indian health status, services, and unmet needs, and establishes the Branch of the Urban Indian Health Programs as the agency responsible for carrying out Title V provisions.

14. **Kusserow, Richard P. (July, 1988). The Urban Indian Health Program: A Bridge to Mainstream Health Care Delivery. Department of Health and Human Services, Office of Inspector General.**

This report is in response to a study to determine:

- 1) whether urban Indian health programs duplicate existing sources of health care in their communities;
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- 2) the extent to which American Indian/Alaska Natives use (and don't use) services provided by the urban Indian health programs; and
- 3) the factors influencing these utilization rates.

During the course of the study, an additional objective was added: to identify program planning and management problems.

Nine of the 37 urban Indian health program sites were selected for review. Primary and secondary data sources consisted of:

- * interviews with urban Indian health program staff, clients, community health center representatives, hospital representatives, additional health care providers, and advocacy and public interest groups; and
- * a random sample of medical records in seven of the nine sites.

Study findings include:

1. Program funding is uneven because of poor or nonexistent documentation of needs, and organizational ineffectiveness in budgetary decision making;
2. Essential planning data are lacking;
3. Utilization rates lack accurate population bases;
4. Many barriers to health care exist for American Indian/Alaska Natives in urban areas; and
5. Many non-Indians use the urban Indian health programs.

Based on these findings, the following recommendations were made:

The Public Health Service (PHS) should strengthen the management of the urban Indian health programs (UIHP);

The PHS should use needs assessment and evaluation data to decide future funding allocations, and individual project level funding;

The PHS should provide more explicit guidelines concerning adequate information and referral programs;

The PHS should complete a detailed analysis of the barriers which inhibit Indian access to mainstream health care and develop an action plan to overcome the barriers; and

The PHS should either move the UIHP from IHS to the Bureau of Health Care Delivery and Assistance (BHCDA) or the PHS should develop explicit linkages on local levels between UIHP clinics and community health centers, and on the national level between IHS and BHCDA.

15. **Sugarman, J.R., et al. (1990). Using the national Behavioral Risk Factor Surveillance System and community-specific surveys to monitor year 2000 behavioral risk objectives in adult American Indians and Alaska Natives:**
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baseline estimates from 1985-1989. Public Health Reports. Rockville, Maryland (107), 4, 449-456.

This study examines the Behavioral Risk Factor Surveillance System (BRFSS) data from 1985-1989 to estimate behavioral risk prevalence for American Indians/Alaska Natives (AI/AN) by U.S. geographic region, and compares these results to those for White Americans. In addition, the BRFSS data is compared to other data sets, including the results of selected surveys in American Indian/Alaska Native communities, in order to explore the validity of the BRFSS as a tool for evaluating AI/AN behavioral risks.

The risk factors compared include: seatbelt non-use; current smoking; current use of smokeless tobacco; acute drinking; drinking and driving; overweight; hypertension; and sedentary lifestyle. Results showed large regional differences in the prevalence of these risk factors (the magnitude and direction of the differences is frequently similar among AI/AN and Whites living in the same geographic regions), and a consistency of the BRFSS data with independently collected data from household surveys.

16. **U.S. Bureau of the Census, 1992. Census of Population and Housing, 1990) Summary Tape File 1.**
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APPENDIX C

HEALTH RISK APPRAISAL RESULTS AND INSTRUMENT

SEX OF HRA SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male	38.5	37.5	38.9	28.6	58.1	36.1	36.8
Female	61.5	62.5	61.1	71.4	41.9	63.9	63.2
Number	65	80	108	119	31	72	475

AGE OF HRA SAMPLE

Male:							
Mean	42.3	40.6	40.5	48.2	52.2	42.5	43.8
Minimum	20	20	22	20	27	18	18
Maximum	70	65	62	82	72	71	82
Std. Dev	16.2	12.5	10.4	17.2	13.4	17.4	14.9
Number	25	30	42	34	18	26	175
Female:							
Mean	42.1	37.7	39.7	47.9	51.7	39.4	42.5
Minimum	18	18	18	20	28	18	18
Maximum	69	64	87	83	83	65	87
Std. Dev	14.7	11.6	13.5	17.6	17.4	13.9	15.4
Number	40	50	66	85	13	46	300
Total:							
Mean	42.2	38.8	40.1	48.0	52.0	40.5	43.0
Minimum	18	18	18	20	27	18	18
Maximum	70	65	87	83	83	71	87
Std. Dev	15.2	11.9	12.3	17.4	14.9	15.2	15.2
Number	65	80	108	119	31	72	475

PERCENT DIABETES WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Yes	23.1	6.3	2.8	13.4	16.1	15.3	11.6
No	76.9	93.7	97.2	86.6	83.9	84.7	88.4
Number	65	80	108	119	31	72	475

PERCENT DIABETES FAMILY HISTORY WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Yes	64.6	41.3	39.8	48.3	50	36.1	45.7
No	35.4	58.7	60.2	51.7	50	63.9	54.3
Number	65	80	108	118	30	72	473

PERCENT CURRENTLY TAKING BLOOD PRESSURE MEDICINE WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Yes	13.8	6.3	8.3	14.3	12.9	6.9	10.3
No	86.2	93.7	91.7	85.7	87.1	93.1	89.7
Number	65	80	108	119	31	72	475

PERCENT CURRENTLY USING SMOKELESS TOBACCO WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Yes	1.5	0	2.8	0	6.4	1.4	1.5
No	98.5	100	97.2	100	93.5	98.6	98.5
Number	65	80	108	119	31	72	475

PERCENT SMOKING STATUS WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Never Smoked	16.9	38.8	52.8	40.3	35.5	36.1	38.7
Ex-Smoker	30.8	38.8	25.0	27.7	45.2	18.1	29.1
Current Smoker	52.3	22.5	22.2	31.9	19.4	45.8	32.2
Number	65	80	108	119	31	72	475

MEAN CIGARETTES PER DAY FOR CURRENT SMOKERS

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	16.5	7.2	14.3	16.3	14.3	16.7	15
Minimum	1	1	1	1	1	1	1
Maximum	50	20	40	69	40	40	69
Std. Dev	10.8	5.4	10.1	14.9	10.1	11.4	11.9
Number	34	18	24	38	24	33	153

MEAN YEARS SMOKING FOR EX-SMOKERS

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	14.2	10.1	9.2	13.0	15.8	15.5	12.3
Minimum	3	1	1	1	3	2	1
Maximum	50	25	30	30	35	50	50
Std. Dev	12.9	6.1	9.4	9.0	10.4	14.4	10.1
Number	20	31	27	33	14	13	138

MEAN CIGARETTES PER DAY FOR EX-SMOKERS

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	14.8	16.6	22	15.5	15.7	16.5	17.0
Minimum	1	1	1	1	3	3	1
Maximum	40	60	65	60	40	40	65
Std. Dev	13.6	16.0	17.8	14.2	10.9	8.9	14.6
Number	20	31	27	33	14	13	138

MEAN ANNUAL AUTO MILEAGE FOR SAMPLE (IN THOUSANDS OF MILES)

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	15.8	16.2	18.2	13.1	16.1	16.6	15.9
Minimum	0	0	0	0	1	0	1
Maximum	99	80	99	99	90	80	99
Std. Dev	17.0	14.6	17.0	14.4	18.1	18.1	16.3
Number	65	80	108	119	31	72	475

PERCENT MODE OF USUAL TRANSPORTATION WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Walk	10.8	17.5	5.6	9.2	0	12.5	99
Bike	0	0	0.9	0	0	0	0.2
Motorcycle	0	0	0	0	0	0	0
Small Car	38.5	45.0	36.1	35.3	48.4	36.1	38.5
Large Car	23.1	13.8	19.4	20.2	22.6	16.7	18.9
Truck/Van	15.4	17.5	35.2	22.7	19.4	25.0	23.8
Bus	12.3	6.3	1.9	11.8	9.7	9.7	8.2
Boat	0	0	0	0	0	0	0
Number	65	80	108	119	31	72	475

PERCENT FREQUENCY OF SEAT BELT USE WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
0-19%	38.5	7.5	8.3	16.8	9.7	26.4	17.3
20-39%	6.2	2.5	7.4	3.4	0	6.9	4.8
40-59%	7.7	3.8	6.5	9.2	3.2	8.3	6.9
60-79%	9.2	7.5	6.5	3.4	6.5	6.9	6.3
80-100%	38.5	78.8	71.3	67.2	80.6	51.4	64.6
Number	65	80	108	119	31	72	475

PERCENT USUAL DRIVING SPEED RELATIVE TO SPEED LIMIT WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
0-5 MPH Over	78.5	45	56.5	64.7	64.5	75	62
6-10 MPH Over	15.4	37.5	31.5	27.7	29.0	16.7	26.9
11-15 MPH Over	0	7.5	8.3	1.7	3.2	6.9	4.8
More than 15 MPH Over	6.2	10.0	3.7	5.9	3.2	1.4	5.3
Number	65	80	108	119	31	72	475

FREQUENCY OF DRIVING AFTER DRINKING (PER MONTH) WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	.7	.3	.3	.4	.7	.4	0.4
Minimum	0	0	0	0	0	0	0
Maximum	10	4	20	10	10	8	20
Std. Dev	1.9	.8	2.0	1.7	2.1	1.4	1.7
Number	65	80	108	119	31	72	475

PERCENT FREQUENCY OF DRINKING 5 DRINKS (PER MONTH) WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
0 Time	65.6	87.5	83.2	80.7	71	77.8	79.3
1 Time	15.6	3.8	9.3	10.1	9.7	9.7	9.5
2-4 Times	15.6	8.8	5.6	7.6	12.9	6.9	8.7
5 or more Times	3.1	0	1.9	1.7	6.5	5.6	2.5
Number	64	80	107	119	31	72	473

PERCENT MOST RECENT RECTAL EXAM WITHIN MALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Less Than 1 year	16	16.2	4.8	32.4	5.6	0	17.7
1 Year	8.0	0	7.1	8.8	16.7	30.8	7.4
2 Years	16	20	14.3	14.7	11.1	7.7	14.9
3 or more years	24	36.7	47.6	23.5	61.1	11.5	37.7
Never	36	26.7	26.2	20.6	5.6	38.5	22.3
Number	25	30	42	34	18	26	175

PERCENT MOST RECENT RECTAL EXAM WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Less Than 1 year	27.5	24.0	21.2	27.1	38.5	23.9	25.3
1 Year	12.5	16.0	7.6	12.9	7.7	8.7	11.3
2 Years	5.0	18.0	7.6	14.1	0	10.9	11.0
3 or more years	30.0	16.0	33.3	20.0	30.8	32.6	26.0
Never	29.0	26.0	30.3	25.9	23.1	23.9	26.3
Number	40	50	66	85	13	46	300

PERCENT FREQUENCY OF PHYSICAL EXERCISE WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
0 times per week	12.0	6.7	14.3	5.9	11.1	19.2	11.4
1-2 times per week	32.0	43.3	50	47.1	44.4	23.1	44.4
3 or more times per week	56.0	50.0	35.7	47.1	44.4	57.7	47.4
Number	25	30	42	34	18	26	175
Female:							
0 times per week	37.5	16.0	33.8	20.0	30.8	26.1	26.1
1-2 times per week	32.5	46.0	40.0	48.2	30.8	43.5	42.5
3 or more times per week	30.0	38.0	26.2	31.8	38.5	30.4	31.4
Number	40	50	65	85	13	46	299
Total:							
0 times per week	27.7	12.5	26.2	16.0	19.4	23.6	20.7
1-2 times per week	32.3	45.0	43.9	47.9	38.7	36.1	42
3 or more times per week	40.0	42.5	29.9	36.1	41.9	40.3	37.3
Number	65	80	107	119	31	72	474

PERCENT BLOOD QUANTUM OF SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Full blood	32.3	41.3	14.8	28.3	9.7	18.1	25.3
1/4-7/8 blood	56.9	51.3	43.5	59.7	58.1	59.7	54.1
Less than 1/4 blood	10.8	7.5	41.7	11.8	32.3	22.2	20.6
Number	65	80	108	119	31	72	475

PERCENT LEVEL OF SCHOOL COMPLETED WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Grade school or Less	7.9	0	1.9	7.8	10.3	2.8	4.5
Some high school	31.7	6.4	7.5	18.1	13.8	13.9	14.7
High School graduate	23.8	19.2	17.0	27.6	13.8	31.9	23.1
Some College	25.4	38.5	30.2	26.7	24.1	27.8	29.3
College Graduate	7.9	10.3	20.8	13.8	17.2	11.1	13.8
Post-graduate or professional school	3.2	25.6	22.6	6.0	20.7	12.5	14.7
Number	63	78	106	116	29	72	464

PERCENT OCCUPATION OF SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Employed Full-time	38.5	83.5	54.8	25	34.7	34.7	45.6
Employed Part-time	9.2	6.3	9.6	12.1	15.3	15.3	10.7
Home maker	10.8	3.8	6.7	14.7	8.3	8.3	9.2
Retired	13.8	1.3	6.7	27.6	11.1	11.1	14.3
Student	6.2	2.5	5.8	5.2	13.9	13.9	6.4
Unemployed < 6 mos.	15.4	2.5	6.7	8.6	8.3	8.3	7.5
Unemployed > 6 mos.	6.2	0	9.6	6.9	8.3	8.3	6.2
Number	65	79	104	116	31	72	467

AGE AT FIRST PERIOD WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	12.4	12.6	12.2	12.8	13	12.7	12.6
Minimum	7	10	8	9	9	9	7
Maximum	16	17	15	17	18	17	18
Std. Dev	1.7	1.5	1.4	1.7	2.4	1.5	1.6
Number	40	50	66	85	13	46	300

PERCENT BLOOD PRESSURE STATUS WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
Normal	48	57	54	56	56	75	56.7
High	52	43	46	44	44	25	43.3
Number	25	30	41	32	18	25	171
Female:							
Normal	75.0	84	82	74	69.3	67.4	76.4
High	25.0	16	18	26	30.7	32.6	23.6
Number	40	50	66	81	13	46	296
Total:							
Normal	64.6	73.7	71	69	61.3	69	69.2
High	35.4	26.3	29	31	38.7	31	30.8
Number	65	80	107	113	31	71	467

PERCENT RANDOM GLUCOSE STATUS WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
Normal (< 115)	64	90	80	77.4	56	79	76
High (≥ 115)	36	10	20	22.6	44	21	24
Number	25	30	40	31	18	24	168
Female:							
Normal (< 115)	70	86	86	84.6	93	80	82.9
High (≥ 115)	30	14	14	15.4	7	20	17.1
Number	40	50	65	78	13	46	292
Total:							
Normal (< 115)	67.7	87.5	84	82.6	71	80	80.4
High (≥ 115)	32.3	12.5	16	17.4	29	20	19.6
Number	65	80	105	109	31	70	460

PERCENT OBESITY STATUS WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
Within Weight	8.0	6.7	19	20.6	22.2	34.6	18.3
Less than 20% overweight	24.0	23.3	21.4	11.8	16.7	30.8	21.1
Greater than 20% overweight	68	70.0	59.5	67.6	61.1	34.6	60.6
Number	25	30	42	34	18	26	175
Female:							
Within Weight	15.0	26	37.9	23.5	15.4	28.3	26.3
Less than 20% overweight	12.5	20	10.6	14.1	30.8	10.9	14.3
Greater than 20% overweight	72.5	54	51.5	62.4	53.8	60.9	59.3
Number	40	50	66	85	13	46	300
Total:							
Within Weight	12.3	18.8	30.6	22.7	19.4	30.6	23.4
Less than 20% overweight	16.9	21.3	14.8	13.4	22.6	18.1	16.8
Greater than 20% overweight	70.8	60.0	54.6	63.9	58.1	51.4	59.8
Number	65	80	108	119	31	72	475

PERCENT AGE AT FIRST CHILDBIRTH WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
No children	10	34	27.3	11.8	0	17.4	19.0
Less than 20 yrs.	55	22	34.8	32.9	23.1	39.1	35.0
20-24 yrs.	25	24	19.7	34.1	53.8	30.4	28.3
25-29 yrs.	10	20	15.2	16.5	15.4	13.0	15.3
30 yrs. and over	0	0	3.0	4.7	7.7	0	2.3
Number	40	50	66	85	13	46	300

PERCENT MOST RECENT MAMMOGRAM WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Less than 1 year	22.5	26	21.2	31.8	38.5	23.9	26.3
1 year	10.0	12	10.6	16.5	15.4	10.9	12.7
2 years	7.5	20	7.6	9.4	0	10.9	10.3
3 or more years	20.0	10	16.7	8.2	15.4	17.4	13.7
Never	40.0	32	43.9	34.1	30.8	37.0	37.0
Number	40	50	66	85	13	46	300

PERCENT NUMBER IN FAMILY WITH BREAST CANCER HISTORY WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
None	75.0	76	80.3	87.1	76.9	91.3	82.3
1	15.0	8.0	9.1	4.7	15.4	2.2	7.7
2 or more	2.5	6.0	0	1.2	0	0	1.7
Number	40	50	66	85	13	46	300

PERCENT HYSTERECTOMY WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Yes	22.5	20	27.3	28.2	23.1	23.9	25.0
No	77.5	80	72.7	71.8	76.9	76.1	75.0
Number	40	50	66	85	13	46	300

PERCENT FREQUENCY OF MOST RECENT PAP SMEAR WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Less than 1 year	32.5	56	42.4	43.5	53.8	43.5	44.3
1 year	20	22	16.7	18.8	23.1	17.4	19.0
2 years	10	16	15.2	15.3	0	19.6	14.7
3 or more years	27.5	4	22.7	18.8	15.4	10.9	17.0
Never	10.0	2	3.0	3.5	7.7	8.7	5.0
Number	40	50	66	85	13	46	300

PERCENT FREQUENCY OF BREAST SELF EXAM WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Monthly	35	38	36.4	29.4	46.2	34.8	34.7
Every few months	50	46	33.3	32.9	38.5	39.1	37.0
Rarely or never	15	26	30.3	37.6	15.4	26.1	28.3
Number	40	50	66	85	13	46	300

PERCENT FREQUENCY OF MOST RECENT PHYSICIAN BREAST EXAM WITHIN FEMALE SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Less than 1 year	47.5	60	48.5	50.6	69.2	54.3	52.7
1 year	15	20	19.7	17.6	15.4	21.7	18.7
2 years	2.5	16	12.1	15.3	0	10.9	11.7
3 or more years	22.5	4	13.6	12.9	15.4	8.7	12.3
Never	12.5	0	6.1	3.5	0	4.3	4.7
Number	40	50	66	85	13	46	300

PERCENT CHOLESTEROL STATUS WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
< 240	96	80	92.5	93.3	88.9	87.5	88
High (≥ 240)	4	20	7.5	6.7	11.1	12.5	42
Number	25	30	40	30	18	24	167
Female:							
< 240	70	88	84.6	79.7	92.3	69.6	79.9
High (≥ 240)	30	12	15.4	20.3	7.7	30.4	20.1
Number	40	50	65	79	13	46	293
Total:							
< 240	80	86.3	87.6	84.4	90.3	75.7	82.6
High (≥ 240)	20	13.7	12.4	15.6	9.7	24.3	17.4
Number	65	80	105	109	31	70	460

PERCENT SUICIDE IDEATION WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
Never	84	73.3	81	79.4	83.3	76.9	79.4
Yes, in last 2 mos.	0	0	0	5.9	0	3.8	1.7
Yes, but not recently	16.0	26.7	19	14.7	16.7	19.2	18.9
No	25	30	42	34	18	26	175
Female:							
Never	77.5	78.0	59.1	78.8	76.9	65.2	72
Yes, in last 2 mos.	0	10.0	3.0	0	0	8.7	3.7
Yes, but not recently	22.5	12.0	37.9	21.2	23.1	26.1	24.3
No	40	50	66	85	13	46	300
Total:							
Never	80	76.3	67.6	79.0	80.6	69.4	74.7
Yes, in last 2 mos.	0	6.3	1.9	1.7	0	6.9	2.9
Yes, but not recently	20	17.5	30.6	19.3	19.4	23.6	22.3
No	65	80	108	119	31	72	475

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APPENDIX D

COMMUNITY HEALTH ASSESSMENT RESULTS AND INSTRUMENT

PERCENT PERSONS IN SAMPLE WITH HEALTH INSURANCE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Male:							
Has Insurance	68.0	73.3	78.6	52.9	55.6	57.7	65.7
No Insurance	32.0	26.7	21.4	47.1	44.4	42.3	34.3
Number	25	30	42	34	18	26	175
Female:							
Has Insurance	65.0	96	75.8	76.5	84.6	65.2	76.7
No Insurance	35.0	4	24.2	23.5	15.4	34.8	23.3
Number	40	50	66	85	13	46	300
Total:							
Has Insurance	66.2	87.5	76.9	69.7	67.7	62.5	72.4
No Insurance	33.8	12.5	23.1	30.3	32.3	37.5	27.6
Number	65	80	108	119	31	72	475

PERCENT WHO PAYS FOR HEALTH INSURANCE WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Self	9.2	33.8	26.9	10	19.4	12.5	22.5
Employer	29.2	48.8	41.7	22.7	29	33.3	40.3
Medicare/Medicaid	26.2	3.8	7.4	21.8	19.4	15.3	17.6
Other	6.2	13.8	18.5	23.5	23	6	19.3
Number	65	80	108	119	31	72	475

MEAN NUMBER OF DOCTOR VISITS IN PAST YEAR WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean	2.5	2.0	2.6	2.8	2.6	2.6	2.5
0 times	18.5	19.0	18.5	15.4	22.6	16.9	17.6
1 time	12.3	24.1	15.7	13.7	6.5	14.1	15.1
2 times	16.9	24.1	18.5	14.5	16.1	11.3	16.8
3 times	16.9	12.7	9.3	9.4	12.9	21.1	13.3
4 times	23.1	11.4	13.0	28.2	25.8	22.5	19.9
5 times	12.3	8.9	25.0	18.8	16.1	14.1	17.2
Standard Deviation	7	6	9	1.8	1.8	1.7	1.8
Number	65	79	108	117	31	71	471

PERCENT DATE OF LAST DOCTOR VISIT WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
< 1 month	32.3	27.5	36.1	34.2	32.3	29.2	32.6
1-6 months	40.0	35.0	32.4	37.6	32.3	45.8	37.4
7-12 months	7.7	17.5	12.0	12.0	9.7	8.3	11.4
12-24 months	15.4	12.5	13.0	11.1	22.6	12.5	13.2
Other	4.6	7.5	6.5	5.1	3.2	4.2	5.4
Number	65	80	108	117	31	72	473

PERCENT TRIBAL ENROLLMENT WITHIN SAMPLE FOR 14 TRIBES MOST OFTEN MENTIONED

Tribe	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Cherokee	7.7	10.	27.8	7.6	22.6	25.0	16.3
Choctaw	7.7	0	7.4	6.7	9.7	5.6	5.8
Navajo	6.2	10.0	1.9	6.7	3.2	2.8	5.3
Sioux	6.2	10.0	0	8.4	0	4.2	5.3
Chippewa	4.6	6.3	6.3	7.6	0	2.8	4.3
Creek	12.3	2.6	2.5	0	3.2	0	3.9
Kickapoo	12.3	0	0	0.8	0	0	1.9
Cheyenne	0	0	0	3.4	16.1	0	1.9
Apache	3.1	1.3	2.8	0.8	3.2	1.4	1.9
Mohawk	0	2.5	2.8	2.5	0	0	1.6
Oneida	0	0	0	4.2	0	4.2	1.6
Chickasaw	0	0	6.5	0	3.2	0	1.6
Potawatomi	7.7	0	0.9	0.8	0	0	1.4
otote	0	0	0	0.8	0	5.6	1.0
Other	43.2	57.4	37.8	49.7	38.8	52.6	47.8
Number	65	80	108	119	31	72	475

PERCENT TYPE OF FACILITY WHERE MEDICAL CARE IS RECEIVED WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Private Dr.	36.9	57.7	72.6	51.3	51.6	55.7	55.9
Family Health center	9.2	10.3	5.7	7.8	9.7	15.7	9.2
Employer clinic	0	3.8	1.9	3.5	3.2	4.3	2.9
Health Department	3.1	0	0	0.9	0	2.9	1.5
Hospital clinic	10.8	3.8	3.8	4.3	12.9	4.3	5.5
School clinic	0	3.8	1.9	0.9	0	2.9	1.7
IHS facility	26.2	5.1	4.7	21.7	0	7.1	12.0
Tribal clinic	1.5	1.3	0	1.7	0	1.4	1.1
Hospital E.R.	6.2	0	2.8	2.6	3.2	2.9	2.7
Other	6.2	14.1	6.6	5.2	19.4	2.9	7.6
Number	65	78	106	115	31	70	465

PERCENT TYPE OF FACILITY WHERE DENTAL CARE IS RECEIVED WITHIN SAMPLE

	Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Private Dentist	27.7	67.5	79.2	50.5	67.7	63.4	60.6
Family Health Center	9.2	3.9	1.9	5.4	3.2	9.9	5.3
Health Department	3.1	2.6	1.9	0	0	0	1.3
IHS	44.6	7.8	2.8	27.9	3.2	8.5	16.3
Tribal Clinic	0	1.3	0	3.6	0	2.8	1.5
Hospital E.R.	1.5	0	0	0.9	0	1.4	0.6
Other	13.8	16.9	14.2	11.7	25.8	14.1	14.4
Number	65	77	106	111	31	71	461

PERCENT PROBLEMS WHEN SEEKING HEALTH CARE WITHIN - E

	Kansas city	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Not knowing	12.3	21.8	28.0	22.4	29.0	19.4	22.5
Cost	55.4	67.9	71.0	60.3	41.9	56.9	62.1
No Insurance	23.1	14.1	29.9	31.9	9.7	37.5	26.5
Too far away	21.5	11.5	19.6	31.0	9.7	15.3	20.0
Lack of transportation	15.4	3.8	6.5	19.8	3.2	6.9	10.6
Lack of trust	12.3	16.7	29.0	24.1	12.9	15.3	20.6
No N.A. providers	13.8	24.4	29.9	27.6	29.0	20.8	25.2
No understanding of N.A. needs	23.1	20.5	15.9	21.6	22.6	13.9	19.4
Number	65		107	116	31	72	469

ANALYT	I	NCOME	RANGES			WITHIN		SAMPLE	
			Kansa City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
< \$10,000			41.5	6.3	17.8	53.4	16.1	40.0	31
\$10,000 - \$19,999			24.6	11.3	15.0	23.3	41.9	25.7	21
\$20,000 - \$34,999			13.8	35.0	33.6	14.7	25.8	17.1	23.3
≥ 935,000			20.0	47.5	33.8	8.0	18.1	17.1	24.6
Number			65	80	107	118	31	70	469
MEAN NUMBER OF PEOPLE IN HOUSEHOLD WITHIN SAMPLE									
			Kansa City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Mean			3.5	2.4	2.5	2.8	2.9	2.8	2.7
Range			1-10	1-6	1-7	1-10	1-6	1-10	1-10
Standard Deviation			2.2	1.4	1.4	1.7	1.3	1.7	1.7
Number			65	79	107	113	31	72	467
PERCENT TYPE OF FACILITY WHERE MEDICAL CARE IS RECEIVED FOR CHILDREN WITHIN SAMPLE									
			Kansas City	D.C.	Houston	Anaheim	San Antonio	St. Louis	TOTAL
Private Dr.			31	63.2	73.1	49	68.8	70.3	58.3
Family Health Center			14	10.5	7.7	8.2	6.3	10.8	9.5
Employer clinic			2.4	2.6	3.8	0	6.3	0	2.1
Health Department			7.1	0	1.9	4.1	0	2.7	3.7
Hospital clinic			4.8	2.6	0	2.0	0	5.4	2.5
School clinic			0	0	3.8	0	6.3	2.7	2.1
IHS facility			31	10.5	9.6	32.7	0	5.4	16.5
Tribal clinic			7.1	0	0	0	0	0	0
Hospital E.R.			2.4	0	0	0	2.7	6.3	2.1
Other			42	38	52	49	37	16	234

Your answers to these questions will help us determine the health needs of Native Americans in **(city)**. Because we are not **asking** your name, the answers you give will be anonymous.

1. Are you currently covered by health insurance?

 No

Y_es If Yes, who pays for your insurance?

s_elf

 employer

 Medicare/Medicaid

 Other (please specify) _____

2. How many visits have you made to see a doctor or other medical care provider for your own care in the past 12 months?

n_one

o_ne

t_wo

t_h_ree

f_o_ur

 other (please specify) _____

3. When was your last visit to a doctor or other medical care provider?

 within the past month

 1-6 months

 7-12 months

 more than 12 months, but less than two years

 other (please specify) _____

4. About how many miles do you travel from your home to visit your doctor or other medical care provider?

 miles

5. What Tribe are you enrolled in? _____

6. At what kind of facility do you receive your medical care?
(check one)

 private doctor's office or clinic

 neighborhood/family health center

 employer operated clinic

 health department

 hospital outpatient clinic

 school clinic

 Indian Health Service facility Where? _____

 Tribal clinic Where? _____

 hospital emergency room

 other (please specify) _____

7. At what kind of facility do you receive your dental care?
(check one)

- ☐ private dentist or dental clinic
- ☐ neighborhood/family health center
- ☐ health department
- ☐ Indian Health Service facility Where? _____
- ☐ Tribal clinic Where? _____
- ☐ hospital emergency room _____
- ☐ other (please specify) _____

a. What problems have you experienced when seeking health care?
(check all that apply)

- ☐ not knowing what health care services are available
- ☐ cost (too expensive)
- ☐ lack of health insurance
- ☐ distance (too far to travel)
- ☐ lack of transportation
- ☐ lack of trust in health care providers
- ☐ none (or too few) Native American health care providers
- ☐ doctors and other health care providers don't understand
the health needs of Native Americans
- ☐ other (please specify) _____

9. What is your family's yearly income?

- ☐ less than \$10,000
- ☐ **\$10,000-\$19,999**
- ☐ **\$20,000-\$34,999**
- ☐ \$35,000 and more

10. How many people are in your household who are supported by
this income? _____

Question #11 is for those of you who have children.

11. At what kind of facility do your children receive their
medical care? (check one)

- ☐ doctor's office or clinic
- ☐ neighborhood/family health center
- ☐ employer operated clinic
- ☐ health department
- ☐ hospital outpatient clinic
- ☐ school clinic
- ☐ Indian Health Service facility Where? _____
- ☐ Tribal clinic Where? _____
- ☐ hospital emergency room _____
- ☐ other (please specify) _____

12. Additional comments? _____

Thank you for your responses!
